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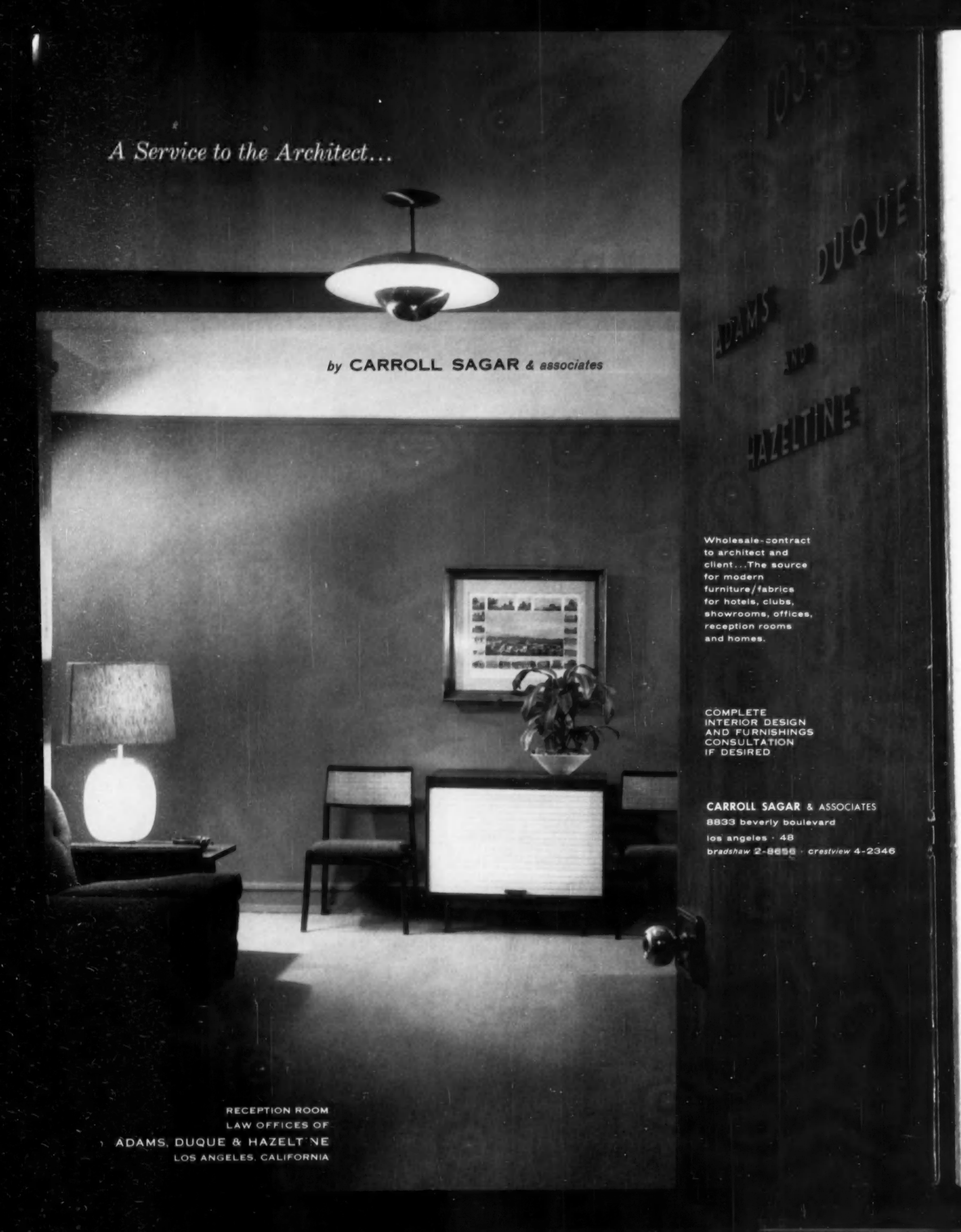

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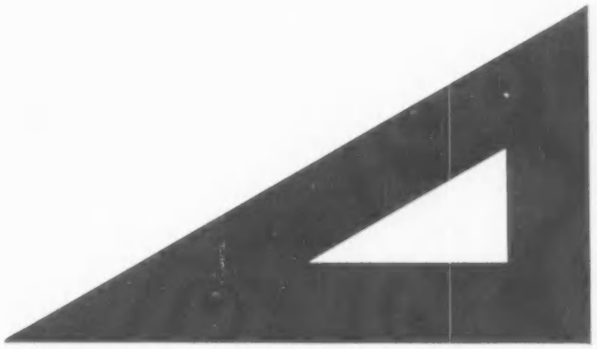

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MUSIC

PETER YATES

CORRESPONDENCES

I have had asthma for a
Long time. It seems to improve
Here in this house by the river.
It is quiet, too. No crowds
Bother me. I am brighter
And more rested. I am happy here.
When someone calls at my thatched hut
My son brings me my straw hat
And I go out and gather
A handful of fresh vegetables.
It isn't much to offer.
But it is given in friendship.

The frail, artificial, not quite truthful poem comes down to us through twelve hundred years and by the dexterous affection of Kenneth Rexroth is translated into language as seemingly unpretentious as it is subtle in reflecting the syllabic word-play of the original.* Frail, because offering no intense emotion; artificial, because it is not substantive to what it represents but a series of brief statements as it were in correspondence; not quite truthful, because the "thatched hut" was the comfortable home of a retired court functionary rich enough that he need not pluck vegetables. The poem persists, and we enter into it as we cannot enter history. None of our moralizing gestures will encompass it, not "Beauty is truth, truth beauty"; it will not set foot on any of Matthew Arnold's touchstones. And although it is the product of an already almost precious style, filled with calligraphic images from a still earlier poetry, these gifts are hidden away. It does not aim to resemble a poem but to be one.

In *The Anchor Review*, 1955, W. H. Auden and David Daiches discuss in turn *The Anglo-American Difference*, recognizing and illustrating distinctions between American and English poets of the present time. Auden quotes Robinson, Frost, Thoreau, Whitman, as poets; then, like so many who wish to express some truth about America, he calls on Tocqueville: "Democratic nations may amuse themselves for a while with considering the productions of nature, but they are excited in reality only by a survey of themselves"—which might apply to Whitman and Thomas Wolfe but not to Emily Dickinson or Wallace Stevens. "It may be foreseen that poets living in democratic times will prefer the delineation of passions and ideas to that of persons and achievements"—which might include Dickinson and Stevens but in a very different order than before. "The language, the dress, and the daily actions of men in democracies are repugnant to conceptions of the ideal"—but this would exclude Stevens, Whitman, Wolfe, and one believes Dickinson; it presents Alfred Kazin's theme of the American novelist as an alienated artist. "The destinies of mankind, man himself taken aloof from his country and his age and standing in the presence of Nature and of God, with his passions, his doubts, his rare prosperities and inconceivable wretchedness, will become the chief, if not the sole, theme of poetry." And that sentence, a vast diorama of literature to be conceived on a new continent, might serve solely by its negatives to utter the desolation of our most serious prose writers; it is not yet positively encompassed by our poets.

Rather this, in a footnote, a statement of our present poetic condition, almost desperate in earnestness, although relegated by Mr. Auden to small print at the bottom of the page: "The undeniable appearance in the States during the last fifteen years or so of a certain literary conformity, of a proper and authorized way to write poetry, is a new and disquieting symptom, which I cannot pretend to explain fully. The role of the American college as a patron of poets has been discussed both here and in England. Those who criticize it, often with some reason, fail to suggest a better alternative. It would be nice if the colleges could ask no more from the poets in return for their keep than occasional pieces, a Commencement Day masque or an elegy on a deceased trustee; if that is too much to ask, then the poets themselves should at least demand that they give academic courses in the literature of the dead and refuse to have anything to do with modern literature or courses in writing.

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*One Hundred Poems from the Chinese by Kenneth Rexroth. A New Directions Book.

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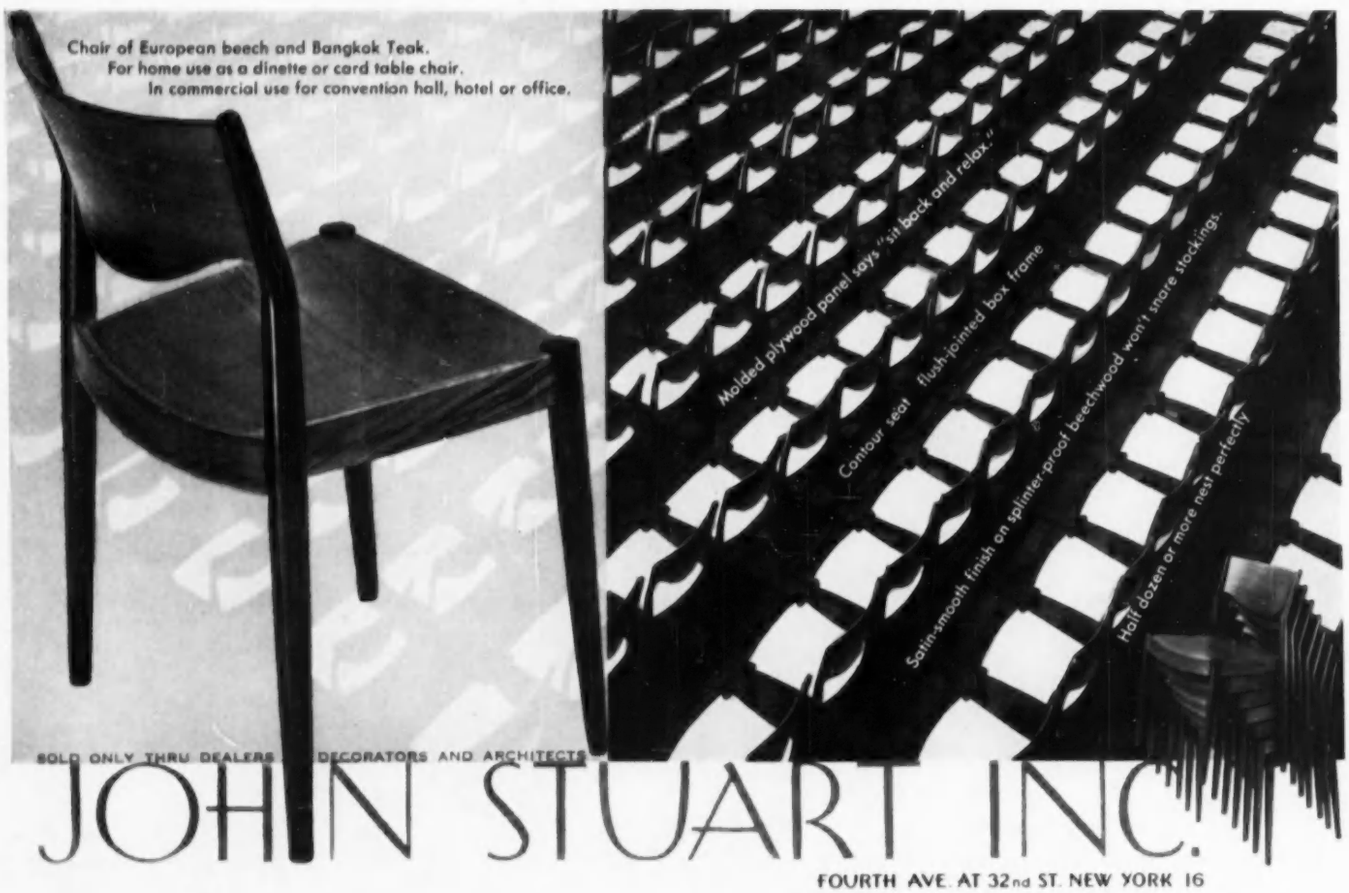
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VOL. 74, NO. 5

MUSIC

(Continued from Page 4)

There has been a vast output of critical studies in contemporary poetry, some of them first-rate, but I do not think that, as a rule, a poet should read or write them."

And now Auden has gone off to a Chair of Poetry at Oxford, leaving behind an article or speech in the *Atlantic* as vague as it is evasive of the issues presented by this footnote. Still speaking of poetry but now the enrobed Bard ascending to the academic throne, as he is portrayed on the magazine cover, he speaks as if to esthetic innocents.

Why should the old mortmain of literary scholarship lie on the work of living poets, committing us as scholars to the dead, who were once alive and beautiful and often mad, being thrust out from the world like John Clare or like Blake refusing to buy its goods. If we find images among the Metaphysicals or, like Auden, in the remote yet fiercely modern vernacular of Middle-English, must we return in isolation to our own century to work out the correspondences for ourselves? Is not isolation the curse of modern poets, that barrier which even Emily Dickinson, most self-isolated of American poets, was impelled to break through? Is not the new collegiate congregating of the poets a herding of buffaloes head down against those surrounding dangers which kept Whitman and Robinson mendicants, which prevented Stevens from publishing a second book until the age of 57, which have made Melville and Charles Ives symbols of both our immense genius and its long rejection—long rejected because of our very incapacity as an idealistic-talking people to accept "the destinies of mankind . . . aloof from his country and his age and standing in the presence of Nature and of God . . . his passions, his doubts, his rare prosperities and inconceivable wretchedness." The poet in the colleges wants to know and feel about these things, as a well-made literary exercise, but he does not wish to suffer them.

Here is another aspect, still from Auden, whose easy continuity of address rather softens than exposes the thinking shock. "American poetry has many tones, a man talking to himself or one intimate friend, a prophet crying in the wilderness, but the easy-going tone of a man talking to his peers is rare; for a 'serious' poet to write light verse is frowned on in America and if, when he is asked why he writes poetry, he replies, as any European poet would, 'For fun,' his audience will be shocked."

In England the serious poet, trained on dead poets, composes light verse in the spirit of easy parody. The American light poet with a style of his own, independent of parody, Ogden Nash, E. B. White, Phyllis McGinley, will tackle serious, even deadly matter with an aplomb, a dexterity, as piercing as it is usually funny. Compare Auden's Phi Beta Kappa poem with Phyllis McGinley's. A chief fault of the so-called *serious* twentieth century American poet is that he will write melodious or solemn verse about trivial matter, because only so can he expect to have it published. If you are a comic poet in America, you can knock about the lares and penates and be paid and admired for doing so; if not, you had better leave the household gods alone.

David Daiches, a professional scholar, who contributes occasional light verse on witty ephemeral subjects to *The New Yorker*, follows along after Auden by saying, "There *is* a modern American poetic idiom . . . The quietly artful precision of the language is its most characteristic feature. The tone is almost (but never quite) colloquial. . . . The object of the poem is to focus the vision, to see the surface of things so clearly that the pattern of an underlying reality begins to suggest itself."

"It would be absurd," he goes on, "to hold this up as 'the' contemporary American poetic style." Yet "is it a mere rationalization to suggest that the Americans, an emotional and even rhetorical people, have learned to find their maturest expression in cunning understatement . . . It is not necessarily great poetry. The tendency of the younger American poets—it has been clear from the 'little' magazines for many years now—has been to produce skillful exercises rather than first-rate poems, *etudes* rather than 'pieces' . . . If, to the poet, language is a way of exploring experience rather than of announcing one's discoveries, it may be safer to concentrate on the discipline of the poetic craft rather than on the cultivation

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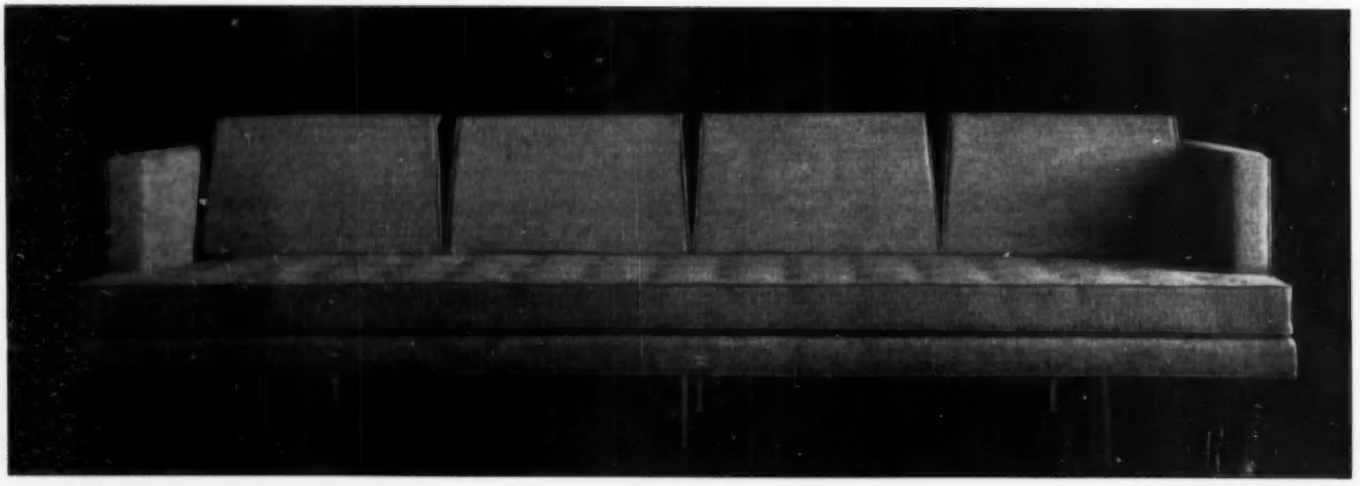

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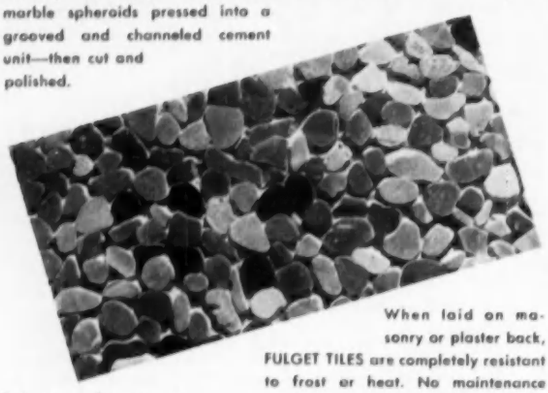

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MUSIC

(Continued from Page 6)

of a poetic state of mind."

I have condensed David Daiches' argument at some length, because it is entirely true—if you read poetry in the better little magazines, those which are controlled by college literary departments. It is true from devout assumption to withering conclusion. These poets are there precisely because they have learned the craftsman's game, as it is taught, and they play safe to be published. If they were desperately serious or savage or brimming over with the immaturity of Whitman, Lindsay, Sandburg, or Thomas Wolfe, a prophetic defiance and proclamation which put seriousness first and craftsmanship in its place; if they were really in touch with anything beneath the surface, not thoughts about it or the piercing cry of words and ideas well exorcised by convention; they would not likely be read in the little magazines or be released from the holes they would have holed up in, except by the accident which somehow sometimes brings forth genius no matter how much prim conformity tries to ignore it or to keep it down.

I might add that the same is true of our composers and is becoming more true every year. This is the sort of truth which is not beautiful; it is ugly and suppressed, the truth against which Blake cried out in the name of truth.

Get away from the little magazines and go away into the unread country, same city, another street, where the literary mandarins exert no power, though there is no place free of their expansive literary influence. What is being written by the poets who do not reach the magazines, big or little, who in bulk lack craft or lightness but make up for it by desperation? Much of what they write is not pretty stuff and the greater part ungainly. But it is a very different tone of voice, a literacy, sometimes an illiteracy, too concerned to be nice; incapable of freeing itself from real pain, passion, agony, isolation. It is the work of poets who are alone, who feel society, sophistication, the literary decision and market fixed against them. Are these poets no good? They are the same who brought forth Whitman and Robinson against the cold resistance of the mandarins; who surged up during the twenties, crude, violent, and impelling, Williams, Lindsay, Masters, Sandburg, even Bodenheim; who turned leftwards in the thirties and were stranded. Now they are blocked off; the universities have taken charge. Williams' *Paterson* is their epic, a symbol of their minds they have not learned to be proud of. Williams himself has been accepted by the literary and, sensing their acceptance, has eased his charge to an amble.

It is late in the year;
Yin and Yang struggle
In the brief sunlight . . .
Drums and bugles ring out,
Violent, cutting the heart . . .
The bitter cries of thousands of households
Can be heard above the noise of battle.
Everywhere the workers sing wild songs . . .
Such are the affairs of men.
Poetry and letters
Persist in silence and solitude.

When Tu Fu wrote this poem the aristocrat spoke for the common man. With Blake the uncommon common man had supplanted the aristocrat; that is still our ideal conception of the poet. Now the would-be aristocrat of letters speaks not even for himself. Unconsciously he aims to resemble a poet, not to be one. He wishes to be accepted, to be neatly published, not for money, to be offered a comfortable corner with a stipend where he may perform verse. The suppressed poet is often not so elegant. He is confused between his own business of trying to be a poet and the general trouble of not being heard; criticism, as he finds that subtle matter in books and magazines, is not interested in his problems and will not help him; he is the voice of a people trying to make itself comprehensible to itself in a society which prefers not to be disturbed. If there are hundreds of literary poets, there are thousands of poets in this country, inarticulate and articulate, who have not the advantage of being accepted in literary circles. They have as much to say and are trying desperately, if with less technical cunning, to find means to say it. Their politics, which are amorphous as Whitman's, their radicalism or incompetence are not at issue. What they are doing, however well or badly conceived, glimmers of our common mind, murkily immersed in the cosmically expanding twentieth century ex-

perience. There is a desperate seriousness in them that I do not find in European poetry. Among them may be the few poets who will again topple the mandarins.

One aspect of their feeling, the raw sensibility, may be recognized in our visual arts, among the drippers, the cage-makers who work in wire, the abstractionists, who have gone apart from meaning. Another aspect is protest, the resistance to convention which is a symptom of alienation. I use the term hesitantly, seeing it in this way, as Kazin presents it, and again, as Brecht speaks of it, in the critical refusal to identify oneself with the protagonists of the drama, the passion of the onlooker that will not let go any vision of human experience until it has been wrung out in determinants of action. Another aspect, the most penetrating and most promising, is the agony of form, which contains these other aspects. It will not yield to bare enthusiasm like Sandburg's or to any amorphous fury; it accepts the critical necessity of Brecht's compulsion; and with these it struggles and labors to wring the substance of present experience towards form, to say what is true with complete accuracy and by that accuracy to command form. These poets are little more accepted than Brecht is on Broadway.

"The easy-going tone of a man talking to his peers" may satisfy Auden. Poetry may indeed be fun, as any art should be when it is fully practiced. When the peers will not listen poetry ceases to be fun, the poet may become another Crabbe:

> "To sing of shepherds is an easy task . . .
> Here joyless roam a wild amphibious race,
> With sullen wo display'd in every face;
> Who, far from civil arts and social fly,
> And scowl at strangers with suspicious eye."

Auden himself has written in his Introduction to *Poets of the English Language, volume IV*: "The wish for an American literature . . . has nothing to do, really, with politics or the national conceit; it is a demand for honesty . . . valid for America, where nature was virgin, devoid of history, usually hostile; and society was fluid, its groupings always changing as men moved on somewhere else." To which he answers: "The prose of Emerson and Thoreau is superior to their verse, because verse in its formal nature protests against protesting . . ."

The deep tide of American art sways to the cold reality of our continental living, which has not changed in a century. For all the national preponderance of home ownership, we are still a nomad nation, prosperous but unsettled, still in search of a society more stable than government or patriotism, driving ourselves still towards horizons no longer visible, measuring mankind by a standard as idealistic and wish-impelled as it is impatient, fanatical, indeterminate because not yet determinable. We are the extreme of the protestant, the authority-seeking peoples. To seek authority is not to accept it. Our art, and poetry is the most searching of the arts, refuses our temporary prosperity, rejects the complacence of the new conservatism, denies the criteria of the academic critics. Crying out against these barriers it wastes its strength; going deeper and refusing entirely to recognize these ephemerae, it remains itself still unrecognized.

This I know: to change the language is not enough or even, as Dr. Williams wishes, the language and grammatical context, for example by eliminating inversions, our inheritance from the German. Style can be heavy as Whitman or complex as James, if it is a style. We aim to make poems, not resemblances. To command the technique is not enough, if that command excludes whatever will not fit. Technique must woo context to impregnate style. And when a style has been made, it should be as it were invisible in the rush of awareness that this is a poem, the poem, our poem; it is what has been made. You cannot anticipate the forms of Emerson, Whitman, Robinson, except as he grew older, you can Frost a bit, but not Dickinson, Pound, Eliot, Williams, Stevens. You might wish better, but you can seldom improve them. Sandburg or Lindsay you can improve or, as with Masters, throw much of it away. These and not the ever-new initiates of the academic mystery have made our poems.

Poetry differs from history, from philosophy, from the processional of prose. It is not what can be explained nor an explanation, vision or description. It may be played at by anyone with the gift of words. The poet makes himself ready and waits. He seeks concentration, to thrust the thought farther back into that spiritual region where insight, inscape, revelation command whole form. Wait-

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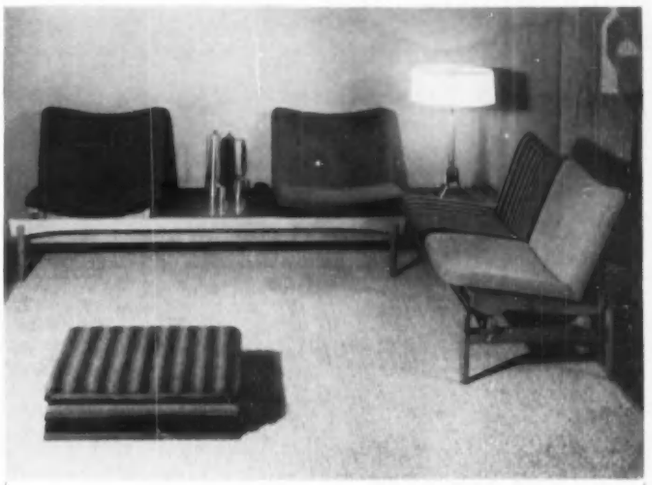

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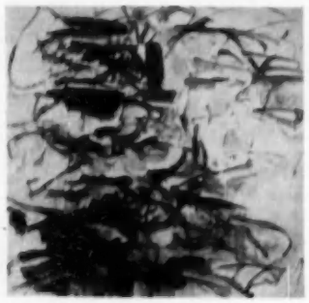
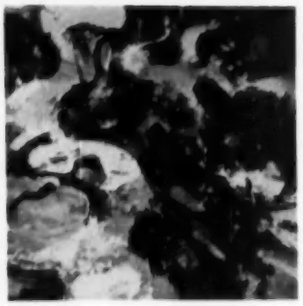
ART

DORE ASHTON

Since the 19th century when the artist was consecrated as professional individualist, the concept of "style" in painting has been increasingly condensed. It has been generally accepted that the role of the artist is to discover and project the idiosyncratic, unique quality of his personality. In cutting away conventions to get to the compound of the soul, the artist has reduced his means progressively until now, in certain sectors of the art world, "style" is taken to mean "autograph." A painter who can invent a signature, or sign, of his own is often accepted as a stylist. Originality is sometimes determined by the distinctiveness of his sign and by the degree of obsessive repetition of that sign. Because of this creeping crypticism



Joan Mitchell: *Mont St. Hilaire*
Courtesy of Stable gallery



James Brooks: *Boon 1957*
Photographs by Rudolph Burckhardt

in our style concept, one of the trends in our painting has been toward eliminating *matière* and tone in favor of line, for line is the most spontaneous personality extension and the nearest equivalent to handwriting.

Consequently, a number of giant drawings have been regarded as painting, leading some nervous art critics to predict the eclipse of painting: an unwarranted wail. After all, linearism in itself is not the danger. There have been valid linear painters throughout history, from Botticelli to Pollock. The real problem presented by modern line-painting is rather the tendency to enlarge small sketches on giant canvases without a corresponding largeness of emotion. In literature, this would be called sentimentalism.

The true painter understands that every touch of his brush creates a plane, and thereby, space. Tone and texture abet this space. The potential uses of the elements in oil painting toward a complex end are known to the experienced painter who can only regard the various approaches as allies of equal value. Through love of the medium, the mature painter comes to use it to its limits, and he is not fearful if the discoveries of the past converge in him. The linearists, content to fly over their canvases with a hurried signature deny themselves the pleasures and advantages of intimacy with their medium.

In the United States I think the urge to simple autograph-invention has subsided even among the young. But in France, it remains one of the salient avant-garde tendencies. It is understandable since French painters have had to turn more vehemently from their own tradition of "belle matière". Their sustained protest against "la bonne facture" is an obvious and perhaps necessary means of escaping vitiated tradition.

A marked use of drawing in painting by a representative of the young "école de Paris" was seen in the show of paintings by Iaroslav Serpan at the Kootz Gallery. Serpan, a Yugoslav living in Paris, has gained a considerable reputation in Paris during the past five years as an artist moving counter to the "tachiste" trend. The free-form, undisciplined quality of tachisme, the French counterpart to our most effusive abstract expressionism, is antipathetic to Serpan, an intellectual who teaches mathematics at the Sorbonne. His idea, developed for several years, was to invent a "sign" of his own (a comma-like form with a long tail) which he then used in a varied series of combinations. Faithful to his sign over the years, Serpan has reproduced it in great tangles, like steel wool; in drifting strings; in barbed wire formations. Like many French painters, he is philosophically oriented, drawing upon his knowledge of mathematical theory for support in his painting. He appears engaged in the notion of progression; of additive formations which acquire, through their groupings, spatial significance. The idea of groups of forms adrift is, of course, fundamental in painting and is reached by many artists with purely intuitive means. Deliberately gauged sequences are common in works by American painters who have never heard of the science of topology.

In the paintings in this show, Serpan tried several variations. In some works the signs were crowded in a dense plane which worked against an asymmetrical open space in a manner comparable to Tobey's. In others, signs were congealed in circular formations which sat coldly on cold ground. If the intention was to provide a depth into which the eye is pulled, the artist failed because of the rather flat handling of the background. In every case Serpan has rendered his sign in black, as if with a fountain pen. Even in those paintings where he creates a dark background for atmosphere, Serpan never succeeds in using the matter of oil paint itself to indicate his space intentions. They are always drawings on toned grounds. There is a curious desiccated quality, a worrying impoverishment in this work. It is as if the artist, with monkish piety, denied himself the luxury of using his medium in its fullest potential.

In the case of Claude Viseux whose first American showing was at Leo Castelli's new gallery, the handwriting is more spontaneous, more closely related to the automatic surrealist tradition from which it springs. Viseux, like Serpan, paints against the background of his canvas, using skeins of line to indicate the space. He has experimented both with the profiled "blot" of the surrealists and the interplay of scrawled lines broken in dots here and there. He likes shiny Duco, preferably like patent leather, and mercurochrome reds. They give his paintings a distressingly slick finish. With Viseux, who is still too young to have established a style, one feels that the rapid drawings in color are rehearsals for works to come. He cannot be blamed if the world accepts these single-voiced works as full-fledged paintings. In the most recent paintings in the show, there are indications that Viseux himself is aware of the thinness of his graphic style for the ink like lines in reds, blues, blacks, and whites are interworked with spatters which serve to relate the lines to the ground, thereby amplifying space.

Younger Americans on the whole have better understood the value of line in relation to volume (possibly through their contact with the work of Pollock, and in some ways, deKooning.) One of the most interesting of our younger painters, Joan Mitchell, has built a style on the basis of a linear technique. Miss Mitchell shares with the young French painters a respect for the white canvas beneath her strokes and a tendency to group single strokes into units of form. But unlike them, she makes full use of the means at her command. If she uses the white of the canvas, it is to extend the spatial concept, for clever variations in the white tones produce an ambiguous and vibrant motion in her backgrounds.

Most of Joan Mitchell's paintings in the recent Stable show suggest

Paul Jenkins: *Shooting The Sun*
Courtesy Martha Jackson Gallery
Photograph by Oliver Baker

Claude Viseux: *Zigane, 1956*
Courtesy Leo Castelli
Photograph by R. Burckhardt

landscapes in their structure—complex, often chilly landscapes with cold streams penetrating their depths and menacing suggestions of violent storm lingering behind the picture plane. These recent landscapes are expressive of a volatile temperament, one which flushes intense emotion from its system through the process of painting. For this reason, the show had a tinge of immaturity. It is as if the artist had to get those large canvases on the walls in order to exorcise

their ghosts and get on with the business of painting. Yet, even in the most hastily construed paintings, there are strong underpinnings of solid composition, accomplished technique and co-ordinated space. The fluency of her scrawl unmistakably reflects a trained, gifted, if impatient hand.

Miss Mitchell's characteristic crisp manner of indicating a sprawling landscape with complicated promontories, glens, and multiple horizons is seen in both "Harbor, December," and "George Swimming." In "Harbor," glacial whites surround a weir of angry, thick strokes moving furiously upward. A series of brief red lines run through the composition providing an emphatic construction, binding the rapids of the center to the icy edges. "George Swimming," the most complex and enduring painting in the show is composed of tiers of form—a rocky isolation. Ropey lines of red, deep blue and brackish green tangle together in shelves which pend toward the lower, pool-like shape. In this painting, and a few others, extreme variations in white tones integrate background with line. In

Serpan: *1956*
Courtesy Kootz gallery

Lester Johnson: *Man and Plant*
Courtesy Zabriskie gallery

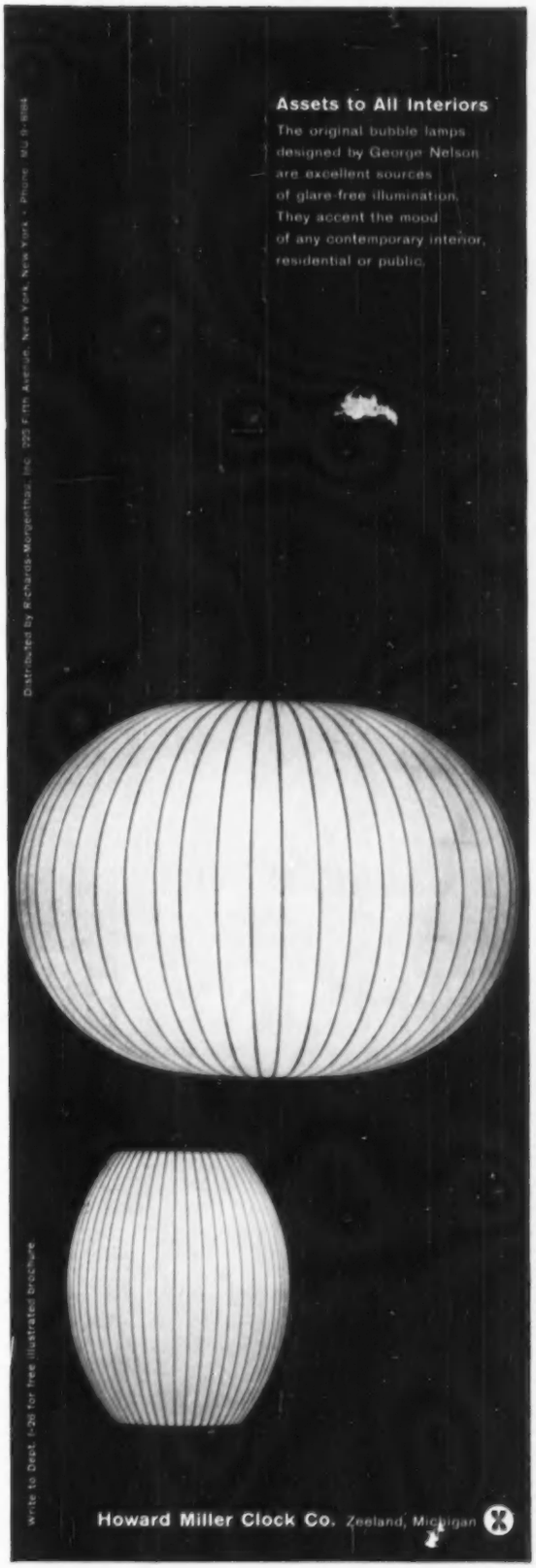
fact, the skillful use of cold whites is one of Miss Mitchell's specialties and she is very efficient in using them to activate large areas.

Another painter whose work insistently evokes landscape is James Brooks, who, born in 1906, belongs to the generation of painters who explored abstract art in the late '40s and since has been identified with the so-called New York school. Brooks is a mature painter in the sense that he has established his style and worked within it for nearly ten years. Unlike a number of New York School painters, Brooks has never been tempted by the joys of thick painting and has stressed color rather than texture in his work. Since his first show of abstractions, Brooks' works has been characterized by its rhythmic, curvilinear flow. He is an intuitive artist whose strong inner rhythm has read through everything he has done. Two or three years ago, Brooks' paintings were filled with bright-colored, undulating forms which gently heaved their way across the surfaces of his canvases, usually in horizontal rhythms. They were then, as now, thinly painted, and never very deep in space. They were often fresh, ingratiating works, but seemed gratuitously composed, even decorative.

But in his recent show at the Stable Gallery, Brooks' vitality is triumphant. The crystal-clear, high-keyed compositions were more firmly composed, with bolder volumes and new depth. He has learned to give his rich colors a weight which achieves a depth others arrive at with texture. Also, he has introduced large open areas through which the spectator can penetrate into the heart of the painting. One feels that the artist has reached a point where a succession of nature experiences has been automatically distilled and emerges in the paintings from secret stores of pure energy.

There are few occasions for extolling a painter in the figurative ranks so I am happy to be able to signal the work of Lester Johnson, a young painter whose originality has been widely noted in New York. Johnson in a recent show at the Zabriskie Gallery, exhibited a strange group of studies of figures and interiors, kept in extremely simple compositions. They are painted with thick, carefully conceived strokes in somber color. Some of the canvases were composed in a kind of oriental perspective: parallel diagonal lines serving as structures. Chairs, window frames, plants and simplified figures all tilt against the back plane in crazy, veering angles. The profiles of the figures—often cut off at the waist or neck—are sometimes outlined in black, and the space around them kept in extremely reticent ochres and buffs or greenish yellows. These rooms are hushed, with a penetrating sense of sanctified domesticity. Johnson seems to be interested in the continuum which relates objects and people, or rather,

(Continued on Page 37)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notes

in passing

Antiquity, as we get to know it from our school textbooks, is essentially Mediterranean, and mainly Greek and Roman. The existence of the early Chinese civilizations, or of the 1,500 years of Hindu evolution before the birth of Christ—in short, the part played by Asia in ancient times—is completely neglected. Alexander's expedition is usually the sole excursion that, metaphorically speaking, we permit ourselves into the East.

Our view of the Middle Ages is also systematically centered on Europe. A few brief allusions to Marco Polo and to adventurous voyages in Asiatic seas are all that we can rely upon to present to youthful minds the existence of a vast reservoir of human beings and unknown civilizations on the other side of the world. Our Modern History is our modern history; Asia plays but a small role in it. Generally speaking, it is quite forgotten. If mention is sometimes made of South East Asia, it is to speak of the Portuguese and Dutch Establishments; if India is referred to, it is to honor the memory of men such as Suffren or Dupleix.

Only with contemporary history does Asia really take shape before us; all our textbooks in current use deal more or less fully with that Continent. But we should say at once that they do not usually do so in a systematic or thorough manner, such as would suffice to teach young people about the ways of life, the economies, the social structures and the spiritual, intellectual or moral outlook of the Asian peoples. After reading the principal textbooks in use, we can make the following observations:

The history of the Asiatic peoples is nearly always approached from the standpoint of European policy and interests. The facts related under the heading, "European Expansion in Asia," are solely those which serve to explain the military or economic exploits of European countries.

The history of Asia is not only superficial, but incomplete. Although Japan—a first-class power at the end of the 19th century—is fairly well known, China is less known and India more neglected still, while Malaya, Korea, Mongolia, Burma and the Netherlands East Indies are omitted from the picture altogether.

The human side of history is left out of account. The school manuals tell us, perhaps, about the East India Company and the Indian Mutiny; but the Japanese, the Asiatic of whatever race, continues to remain a closed book. The ways of life, the social structures, the aspirations of these peoples remain veiled from us; we learn nothing of their standards of living, their level of education, the meaning of their religions, or their internal administration. The colonial and imperialist tradition of nineteenth-century Europe is palpable in these pages; it is, therefore, not as citizens of the world that we discover the Continent of Asia.

A certain number of the textbooks in use do not pursue their subject beyond the year 1914. A special study is sometimes devoted to Japan, but the rest of Asia is left in obscurity.

The following general picture may therefore be drawn:

1. The whole aspect of Human History, so far as Ancient Times and the Middle Ages are concerned, is liable to be falsified by almost complete ignorance of the principal centers of the civilization of Asia.

2. Contemporary Asiatic history is so presented as to encourage an approach to current Eastern problems with the mentality, almost, of a person living at the end of the 19th century.

3. We know too little of the inner life of these peoples, and of their economic circumstances.

4. Only the great political issues of concern to Europe are studied; nothing without a European context exists.

5. It might be desirable that every Asian country should be given a place in our Contemporary History, and that we should be briefly documented on the social, moral, intellectual, evolution of the great Asiatic centers, past and present.

6. In view of the current reawakening of Asia, it is more than ever important that our school textbooks should deal with the history of that Continent and its development since 1918. It would be desirable for them to include a treatment of topical problems—a delicate matter, which the popular press is so ready to serve up to young minds that are uninstructed or inexperienced in these questions.

From the majority of textbooks in use, it is apparent that, despite their authors' evident attempts at objectivity, little space is devoted to Asian countries in these books; Asian history is seen almost exclusively from the European standpoint; these peoples remain little known, since their dealings with other countries teach us nothing about them; our view of Asia remains fragmentary and biased, and though "modern" Europe may be familiar to us, Asia is certainly not.

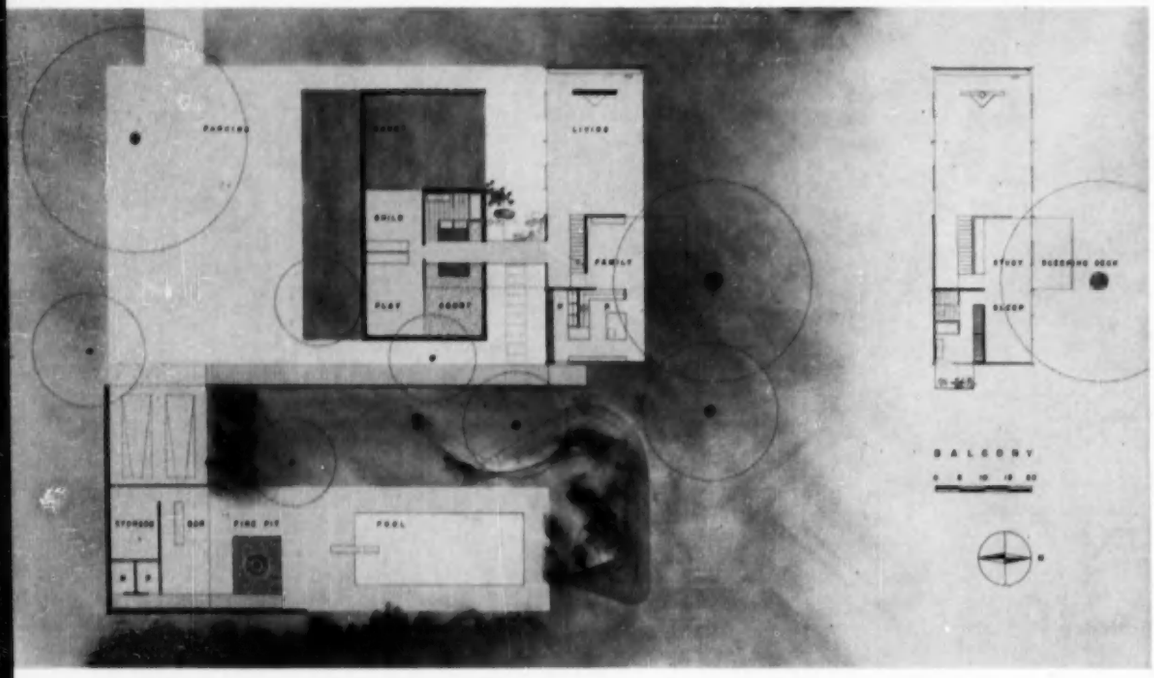
—UNESCO COURIER

19

PROJECT FOR CASE STUDY HOUSE

BY DON KNORR AND ASSOCIATES | INTERIOR PLANNING: ANNE KNORR

CONTRACTOR: WHELAN CONSTRUCTION COMPANY



This is the nineteenth in our continuing series of the contemporary houses sponsored by ARTS & ARCHITECTURE. In this case, we are pleased that the activity will extend itself to the northern part of California where a somewhat different set of living circumstances prevails. Most of the problems have now been resolved, and what is shown here is by way of preliminaries which will be subject to whatever changes might be found necessary by the magazine and the designers involved.

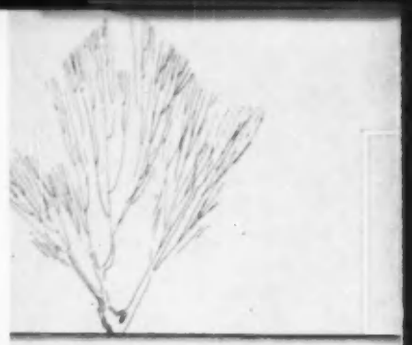
Location: The Bay area, in Atherton, California; approximately 25 miles south of San Francisco. The site is a beautifully wooded flat acre, a portion of an old estate recently divided into eight one-acre sites.

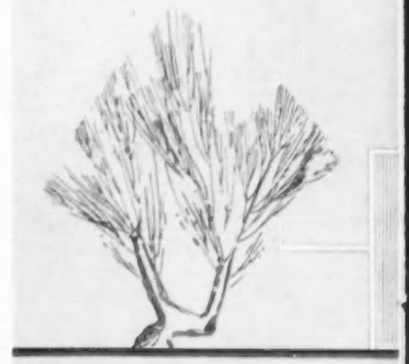
The design program was prepared to fit the needs and desires of the clients, a young physicist, his wife, and their little boy, a family that enjoys music, politics, the arts, and outdoor activities. Other than the space requirements, high priority on the excitement of volume relationships was stressed over physical convenience. The house consists of two separate buildings, with the main portion a two-story unit, 20 feet wide and 60 feet long. The materials in this section will be primarily steel, glass and wood. At the far end of the two-story living room will be a free standing fireplace, directly behind it, a library wall the full height of the room. Access to the upper sections will be by a rolling ladder. One side of the living room faces into the masonry court, the opposite side out onto their private park where there are already existing varieties of specimen trees and shrubs.

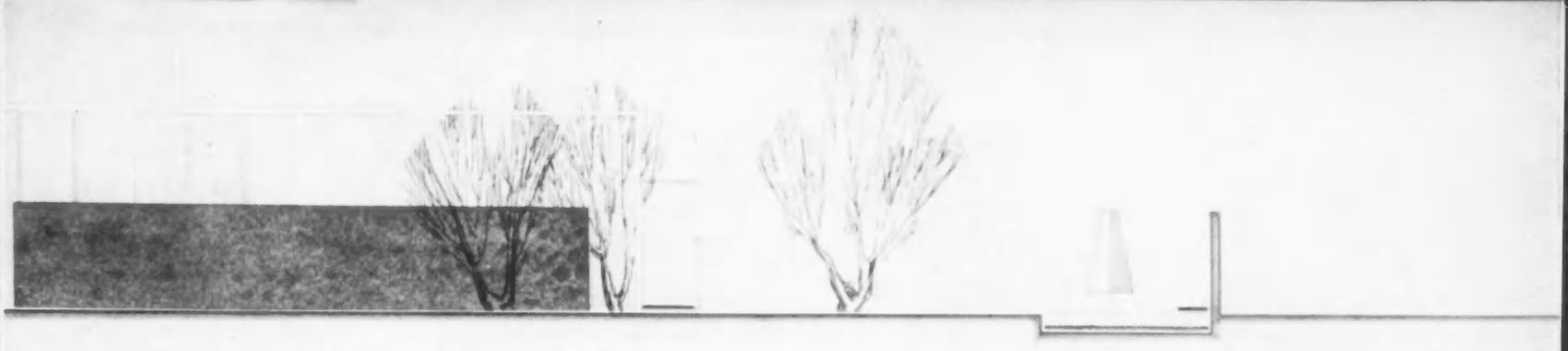
On the second level of this section of the house will be the master bedroom, study, and a sleeping deck overlooking the living room and the park vista. The other section of the house, a one-story masonry building connected by a glazed entry, will serve for the present as a sleeping and play area for the child, and also for guest facilities.

The location of the swimming pool was primarily determined to take full advantage of the sun and, specifically, to be isolated from the house. It was felt that with the pool out of sight the pleasures of this recreation area would wear longer and have a definite disassociation from every-day living. A combination of severe local building setback requirements and the utilization of this area for the swimming pool made it necessary to divorce the carport from the house. In this case, convenience was considered irrelevant by the clients in order to achieve the desired environment. In general plan and arrangement, the purpose is to create a total and exciting environment where elements of surprise and satisfactions come from a separateness of activities.

The preparations for building this house are now being made, and it is hoped that construction will begin within the next thirty days. Continuing reports will be made on its progress, and, like all Case Study Houses, it will, on completion, be completely covered in ARTS & ARCHITECTURE and opened for public inspection.

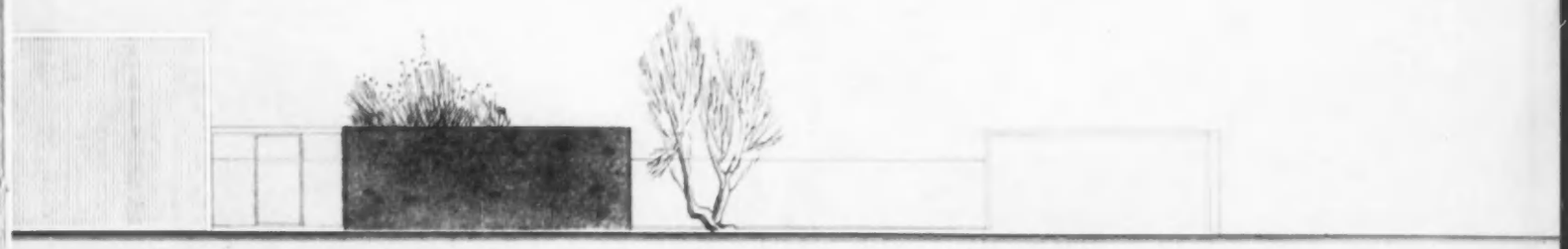




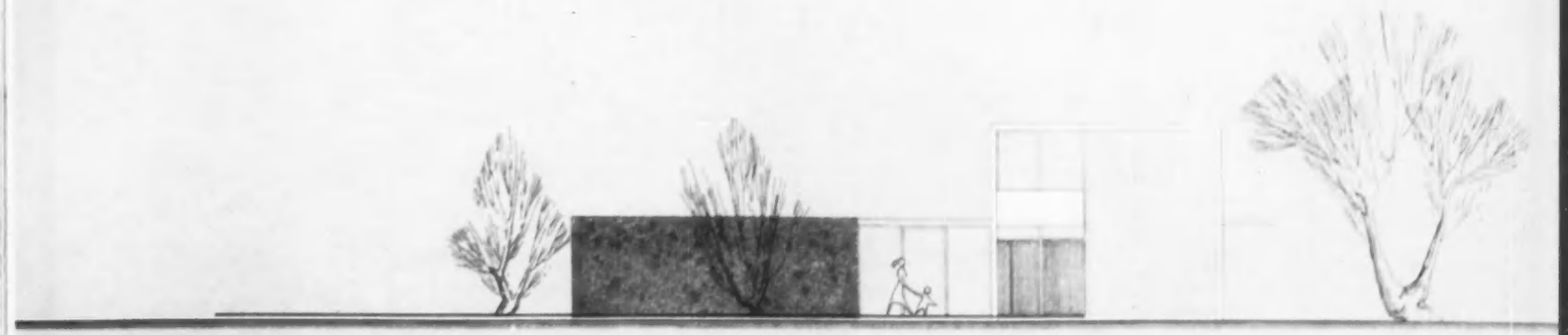


SOUTH ELEVATION

NORTH ELEVATION

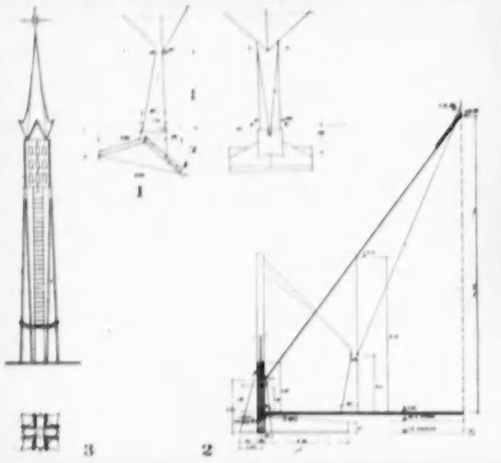


WEST ELEVATION



CONCRETE SHELL FORMS — FELIX CANDELA

A MAJOR EXHIBITION OF THE WORK OF FELIX CANDELA IS BEING SHOWN AT HARRIS HALL, UNIVERSITY OF SOUTHERN CALIFORNIA, FROM MAY 7 THROUGH JUNE 12; SPONSORED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA'S FINE ARTS DEPARTMENT AND SCHOOL OF ARCHITECTURE THE ARCHITECTURAL PANEL, AND THE AMERICAN INSTITUTE OF ARCHITECTS, SOUTHERN CALIFORNIA CHAPTER; ARRANGED BY DON GOODALL, CHAIRMAN OF THE FINE ARTS DEPARTMENT OF THE UNIVERSITY OF SOUTHERN CALIFORNIA, AND ESTHER McCOY



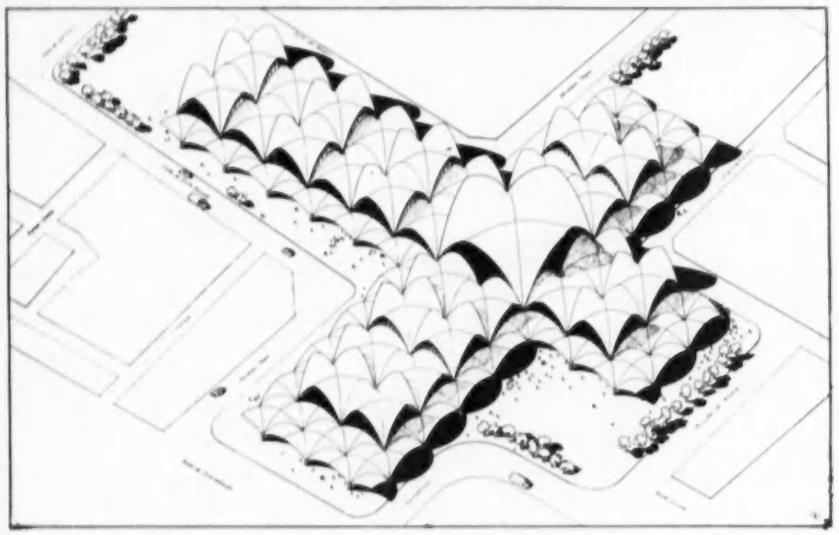
PHOTOGRAPH BY LOLA ALVAREZ BRAVO

IGLESIA DE LA VIRGEN MILAGROSA.

Drawing No. 1: Structural section and elevation of one of the interior columns of the nave. The surface of the column is formed by three warped surfaces arising from a triangular base. The shape of the column was not dictated by, but actually does coincide with the diagram of downward thrusts at this point.

Drawing No. 2: Structural sections taken at two points of the roof of La Milagrosa showing the relationship of the edges of each paraboloid.

Drawing No. 3: Plan and Elevation of the Bell-Tower. In keeping with the general design of the church, this tower is also composed of warped surfaces. The intermediary campaniles, considered by Candela an unsatisfactory feature, were introduced during the course of construction to increase the height of the tower.



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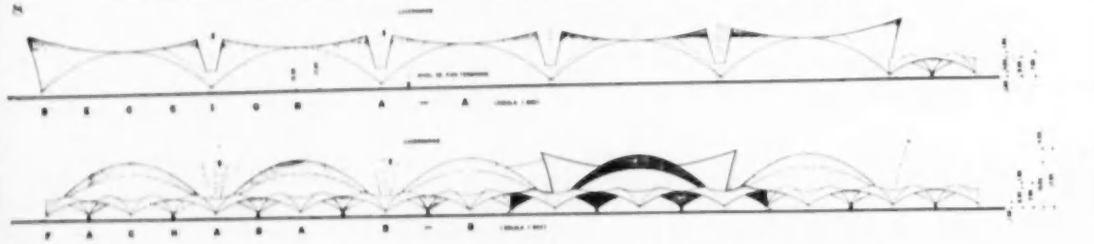

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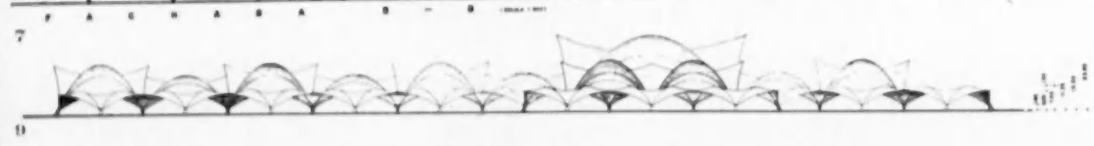


9

10

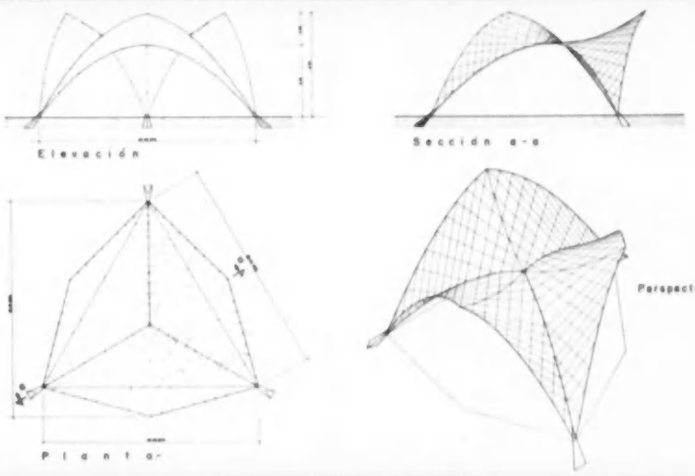
PROJECT FOR A MARKET

Drawing No. 7: Cross section and elevation of scheme a. This project, if built, will surely be one of the most beautiful and awe-inspiring structures of all time. Not merely because of its gigantic size, but because of the delicacy of the forms, and the fact that there will be no visible beams throughout. The design is entirely formed of repetitive units, but they are so merged together as to give a completely uninterrupted flow, and it would be hard to imagine anything less monotonous. Around the perimeter of the great vaults is a continuous rippling band of doubly-curved shells, whose forms are also derived directly from the groined vaults. To see how this is so, we must imagine two groined vaults placed along side each other: a common parabolic arch is thus formed by the juncture of two of their perimetral arches. Now taking this arch as the diagonal of a square, the contingent paraboloid on each of its sides is removed. The new structure which results is square in plan and supported at its two lower corners which are joined by the diagonal cross arch. Each elevation of this structure is seen to be a half-arch, and when several of these forms are placed together, the apparently continuous effect in drawing No. 7 is obtained.

Drawing No. 8: Aerial perspective of scheme b. This scheme uses the same solution for the perimeter area. In the great hall, however, the larger vaults are replaced by those of 26x26 mts., except for one at the intersection of the cross, and these smaller vaults are staggered in height to get extra lighting.

Drawing No. 9: Elevation of scheme b.

Drawing No. 10: Elevation of scheme c. This scheme entails covering the entire plan with the half-vaults described in scheme a. At points of juncture, the roofs are again opened. These apertures are covered by small elongated paraboloids in the form of arches, to enable the windows to be vertical and the lighting indirect.



11

PROJECT FOR THE CASINO OF THE SAN JOSE HOTEL IN PUERTO RICO.

Drawing No. 11: Plan, elevation, section and perspective of shell. This drawing shows one of the solutions studied for the new casino now under construction in Puerto Rico. It provides for a structure of almost hexagonal plan, supported at three points. The shell is formed by three similar hyperbolic paraboloid sections. Max Borges, Jr., is the architect.

Shells are as old as nature, and it was from nature that Felix Candela learned his first lesson: all shells have compound curves, and their strength is derived from their shape rather than their thickness. The stresses in the surfaces of a shell are so evenly distributed that no one point is more vulnerable than another.

To apply this principle to architecture required more than an understanding of how nature works, for she does not pour her shells, and she needs no supporting framework to build them. Her creations are free in space, while a work of architecture is fixed.

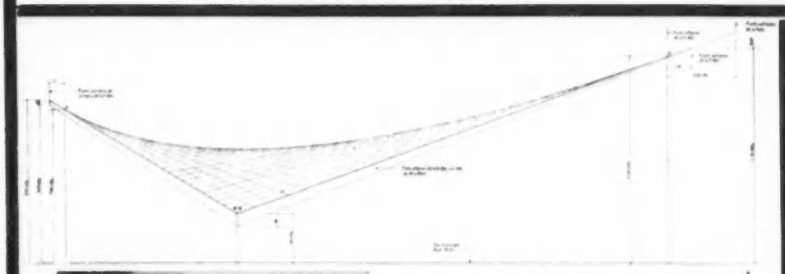
To the architect and engineer a shell means a continuous curved surface whose supports are integral with the structure. There are numerous kinds in architecture, the simplest of which is the cylindrical shell. This was the first type to be built, the Zeiss factory in Jena, Germany, in 1924. A culmination of a century of investigation, which started in 1828 when Lamé and Clapeyron, French engineers, presented the first analytical approach to shells, the direct application of theory to structure became possible only after the development of a monolithic material, reinforced concrete, in the last quarter of the 19th Century.

Man is a close observer of nature and has enjoyed amassing knowledge of the way she builds, but the shapes he is accustomed to using—cubes, flat surfaces—are unknown in nature. She is not a classicist; she has no post and beam construction. Her products, including man, all have compound curvatures, and are held together by tension.

The shell roof of Candela's El Atillo Chapel reminds one of no shells in nature, rather of a single leaf gently twisted in the wind. The membrane drape of the roof surfaces of Iglesia de la Virgen Milagrosa is like the webbing of a bat's wing. But the roofing systems for both are hyperbolic paraboloidical shells, which are generated by stretching an elastic web of concrete over four points. The surfaces, as noted, do not depend upon their thickness for their strength, but rather upon the membrane action.

It is in the design of hyperbolic paraboloidical shells that Felix Candela has committed his genius.

Between 1924 when Carl Zeiss designed his factory in Germany, and 1950 when Candela executed his first hyperbolic paraboloid, an understanding of the theory of shells had spread rapidly. This

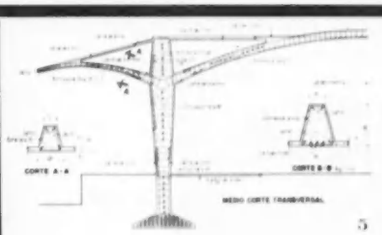


4

PHOTO LUIS ARAGON

LA CAPILLA DE NUESTRA SEÑORA DE LA SOLEDAD (EL ALTILLO CHAPEL)

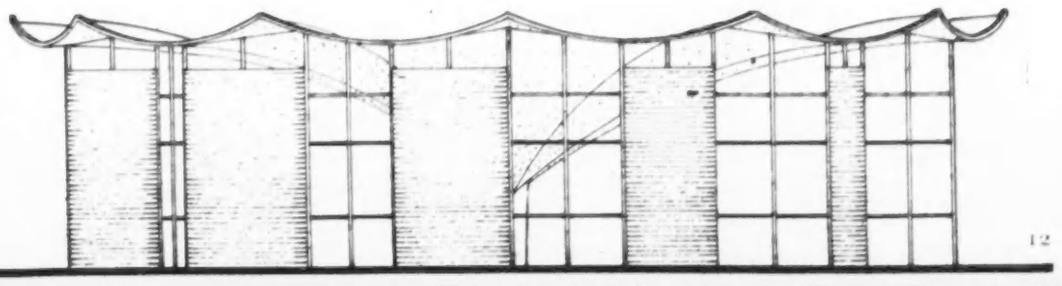
Drawing No. 4: Structural elevation of the roof leaf, which is a hyperbolic paraboloid on a rhomboidal plan. The fine lines above the edge beam indicate the generators which rule the surface. Enrique de la Mora y Palomar is the architect, Candela the designer and erector of the roof system.



5

ADUANAS DE MEXICO (MEXICO CITY CUSTOMS WAREHOUSE)

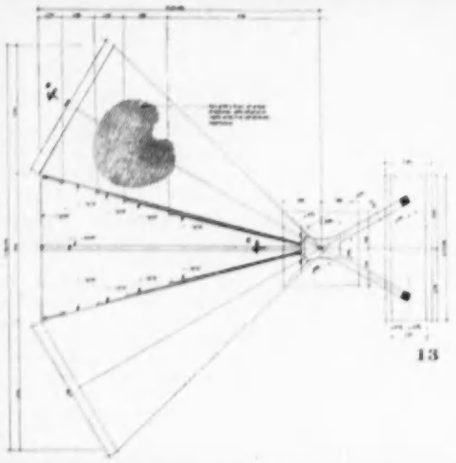
Drawing No. 5: A half-section taken through one of the columns showing the steel reinforcing in the column and the stiffening rib. The structure is composed of short cylindrical shells with a span of 20 mts., with a six mt. cantilever wing on each side. The tie-rods are over the roof.
Carlos Recamier is the collaborating architect.



12

OFFICES FOR THE PENNSALT CO. IN MEXICO.

Drawing No. 12: Elevation of building showing the staggered system of walls and windows, and the enormous (20x20 mt.) dodecagonal umbrella which is the roof. The almost circular shell is divided equally into twelve equal hyperbolic paraboloids which spring out radially 10 mts. from the one supporting column at the center. The curved borders and groins give an almost liquid and enate appearance to the structure.



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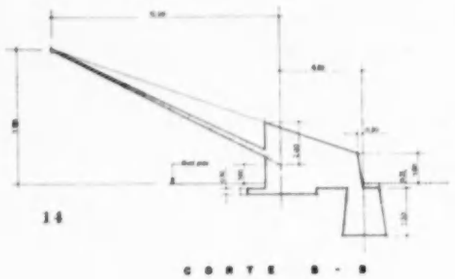


14

CORTE B - B

BANDSHELL IN SANTA FE HOUSING PROJECT, MEXICO CITY.

Drawing No. 13: This bandshell is built in the new housing development of the Instituto Mexicano del Seguro Social, under the direction of architect Mario Pani. The structure, although seemingly complicated, is simply a triple-cantilever formed by six hyperbolic paraboloids. Each paraboloid commences at the base as a vertical and ends at the edge a horizontal. The structure was designed and calculated in a single day. The solid bastion below ground to the rear (see drawing No. 14) is a weight to compensate the cantilever. Drawing No. 13 shows the plan with the placing of the reinforcing rods. Drawing No. 14: Schematic section showing arrangements of masses.

new and imaginative approach to the roofing of large areas gave latitude to structural layout, and it made the most economical use of materials of any other system of construction.

In the intervening years came some significant examples, among them Freyssinet's hangar at Orly, France, the first application of shell design in this field, a primitive shell, the simplest kind of doubly curved paraboloid, Torroja's cylindrical shell for a fronton court in Madrid in 1947; and Maillart's temporary shell for the Zurich Exposition of 1939, his only essay in shell design.

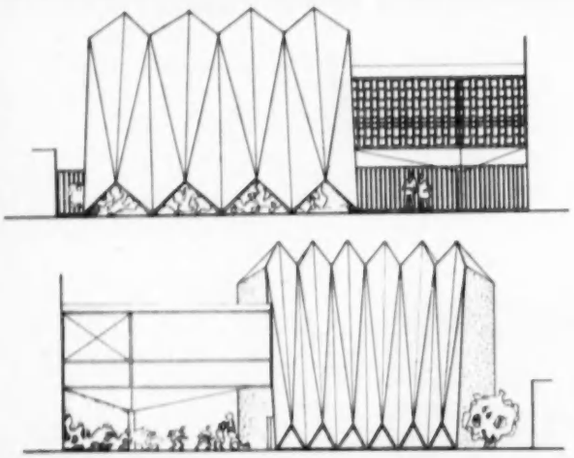
Nervi has contributed some superb designs for the roofing of large areas, particularly his Exhibition Hall in Turin, Italy, but his structures are articulated and joined, and he makes use of prefabricated concrete roof elements, of great beauty in themselves, which excludes his work from pure shell construction except in a few isolated cases.

An architect who was intrigued with the shell was Antonio Gaudi, who used hyperbolic paraboloidical surfaces for roofing parts of his Casa Milá, a chapel in Güell Park, and for certain portions of his church, La Sagrada Familia, in Barcelona early in the century. Unlike Candela's work in this type of shell, they do not act alone in a structurally logical way. The function of the structure and its economy are Candela's first preoccupations.

There existed an even more important difference between Candela's shells and others. His are thin, and the essence of the shell is its thinness. If upon the appearance of the new plastic material —reinforced concrete—the shell form was proved, there awaited its development as a thin roofing surface before it could emerge from the experimental stage to take its place in architecture.

It came in 1950, when Candela designed the roof for the Cosmic Ray Pavilion for Mexico's University City. This shell was not experiment for experiment's sake: a roof thin enough to admit cosmic rays was required.

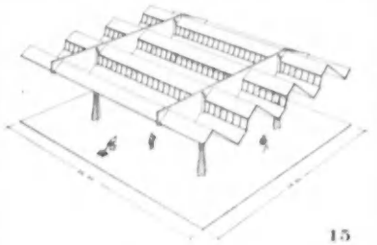
Reinforced concrete is the standard building material in Mexico, because of its economy, the scarcity of steel, and also because concrete responds to handcraft methods. It happens that little steel is necessary for shells, for the stresses are so evenly distributed that almost no bending moments exist. And shells are easy to build with unskilled labor; they are no more difficult that the



16

PROJECT FOR THE THEATRE OF THE ANGLO-MEXICAN CULTURAL INSTITUTE IN MEXICO.

Drawing No. 16: Street and back elevations of this small theatre, showing the folded shells covering the auditorium, and the elevated lobby which connects the theatre with the existing Institute building. Another example of the great structural and aesthetic possibilities of prismatic shells. It is interesting to note that similar structures to these might be executed using the hyperbolic paraboloid.



15

PRISMATIC SHELLS FOR INDUSTRIAL BUILDINGS.

Drawing No. 15: Perspective of Folded Plate Slab structure with suggested dimensions. This drawing is part of a series which Candela devoted to the study and mathematical analysis of prismatic shells some years ago.

21

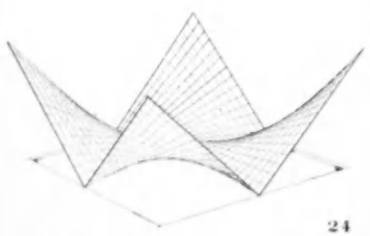
20

PROJECT FOR SYDNEY ROSS LABORATORIES, MEXICO CITY.

Drawing No. 20: Aerial perspective showing the generators of the surface. This huge shell for an American chemical company will serve as a warehouse. The structure is square in plan, with one column in each corner and another in the center. The roof consists basically of four hyperbolic paraboloids, each with a support at its lower corners. However each paraboloid is divided again into two sections by a diagonal arch springing from each support: this is to keep the rise relatively low.

Drawing No. 21: Elevation and section through the shell.

Alejandro Prieto is the architect who is in charge of the design of the whole complex.

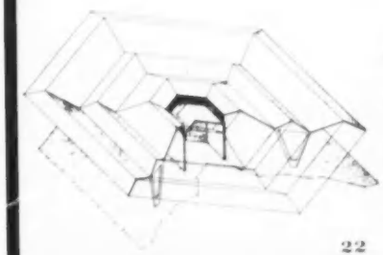


24

SHELL STRUCTURE FOR ARCHITECT JOSE LUIS SERT.

Drawing No. 24: Perspective of shell. This structure consists of four hyperbolic paraboloids on a square base, with supports at the center of each side.

23

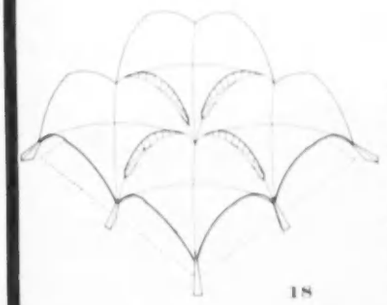


22

TWO DESIGNS ON A HEXAGON BASE.

Drawing No. 22: This solution is an another prismatic or folded plate shell. Drawing No. 23: Elevation of a second solution, also hexagonal in plan. The structure is composed of six hyperbolic paraboloids of rhomboidal plan; each edge in each paraboloid is half a parabolic arch. The structure is supported at six points.

Both these designs are solutions proposed for a storehouse by Architect Luis Rivadeneyra.

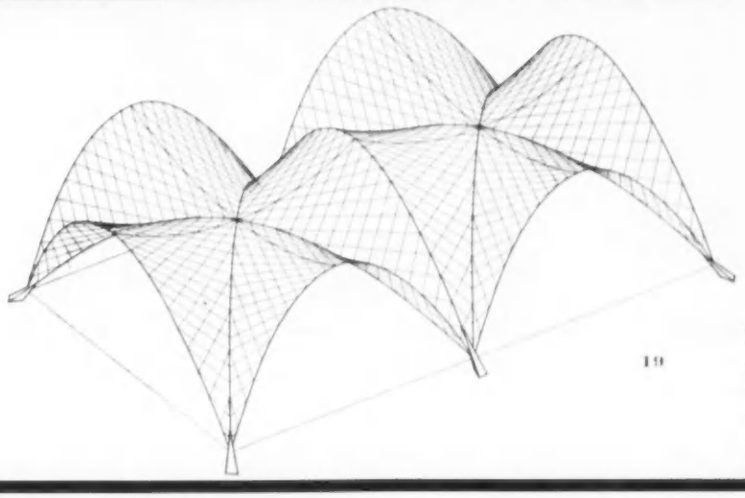


18

GROINED VAULTS FOR ECONOMICAL SPANS OF 100 FEET IN INDUSTRIAL BUILDINGS.

This drawing No. 18 is an aerial perspective of a project for a factory in Mexico City demanding the most economical possible method for spans of 100 feet in each direction. The vaults are opened at points of juncture to permit a hanging catwalk and natural lighting.

Enrique de la Mora y Palomar is the architect of this church. Candela was contracted for the execution and structural design of the shells only.



19

PROJECT FOR CHILDREN'S TRAIN STATION IN CHAPULTEPEC PARK, MEXICO CITY.

Drawing No. 19: Perspective of groined vaults, showing system of generators. This is another example of the use of the groined vault formed by doubly curved surfaces. In this case it is play architecture, and the lightness and small scale (12x12 mts.) of the vaults seem especially adapted to the program.

traditional vaulting work done in Spain with hollow bricks, which Candela had watched masons build from memory.

How the Cosmic Ray Pavilion was to be constructed by handcraft labor was a factor as important as the extraordinary thinness required. The solution was two hyperbolic paraboloidical vaults coupled along a principal parabola, and stiffened by three concrete arches to avoid buckling.

"The two director planes form an angle of 60°. Each generatrix of a system intersects all the generating lines of the other one, but does not touch those of its own system, being in parallel planes with them. The formwork was made of ½" tongue and groove flooring laid, in an approximate form, according to a generating system, on 2x4" wooden joists disposed exactly along the other system of straight generatrix. The reinforcement, disposed along the principal parabolas, was a mesh of ⅜" mild steel wire placed 4" on centers." Thus Candela describes the method of construction.

After the forms were in place the concrete was troweled on by hand, and was then vibrated. The roof was the thinnest ever to be constructed: ⅜" thick, increasing to 2" at the springings.

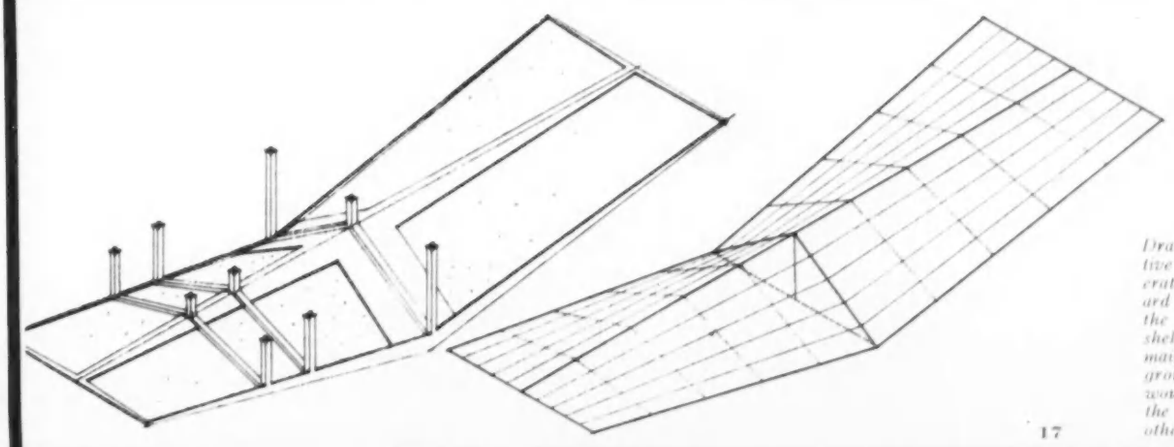
Up until the construction of the Cosmic Ray Pavilion, shell forms were an architectural indulgence. Now they became economically feasible. They were ready to take their place on our landscape.

Felix Candela was born in Madrid in 1910. He became interested in shells in his student days at Escuela Superior de Arquitectura, from which he was graduated in 1935. But, he said, "The mathematical barrier so cunningly laid by the German scientists who developed the method restrained me for some years from seriously considering the possibility of building shells myself."

The fact was that during the years of experimentation the natural evolution of the shell was being obstructed by the mathematician. The solution of the shell was wrapped in a tight cocoon, woven of such heavy cables of statistics that the butterfly was caught inside.

There were more equations than shells. By a miracle some were built. But a few butterflies do not declare a summer. The shell

(Continued on page 52)

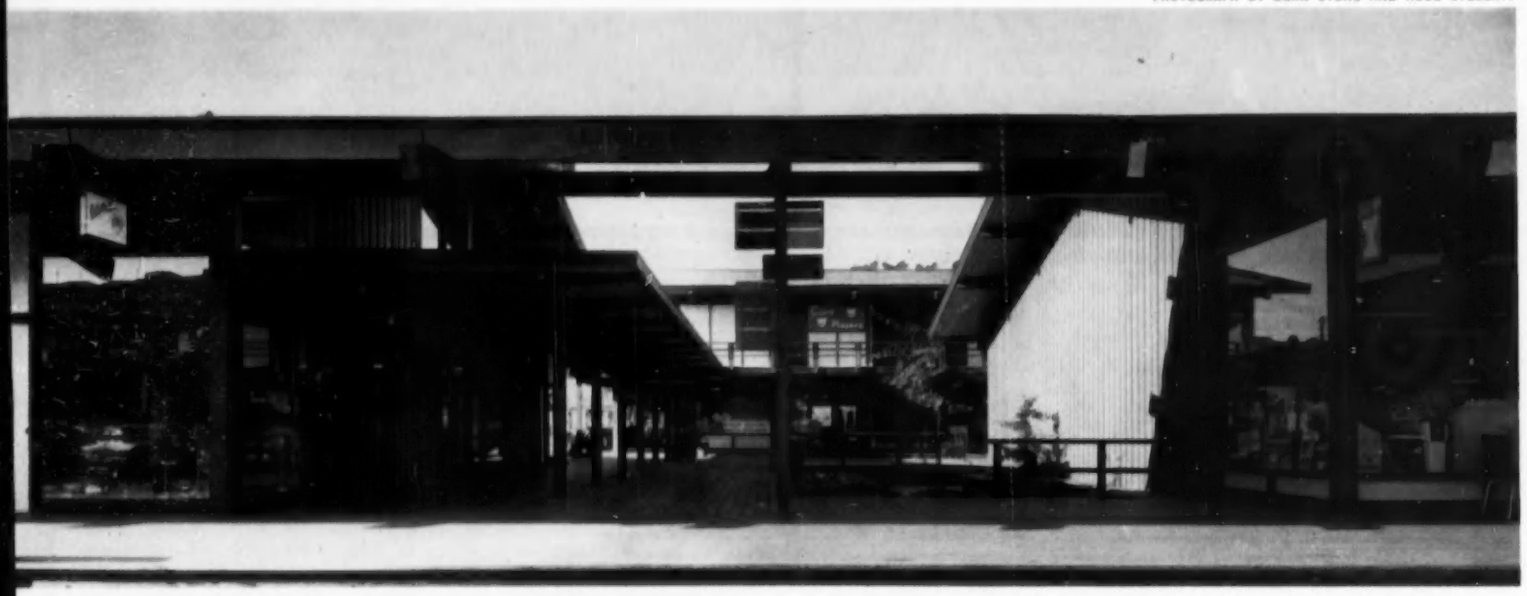


17

PROJECTED ENTRANCE CANOPY FOR RICHARD NEUTRA, ARCHITECT.

Drawing No. 17: Axonometric perspective and perspective showing the generators of the shell projected for Richard Neutra as an entrance canopy to the new U.S. Embassy in Karachi. The shell was to hang from beneath the main building, which is mostly open at ground level. One side of the shell would thus cantilever about 50 feet over the entrance walk and drive, while the other would extend beneath the building.

PHOTOGRAPH BY DEAN STONE AND HUGO STECCATI



**AWARD OF HIGHEST HONOR—
BOARDWALK SHOPPING
CENTER, BELVEDERE
JOHN LORD KING, ARCHITECT**

Belluschi: I think the Jury was delighted to see the professional hand of architects in this particular field of buildings. We hope this particular project may serve, in a sense, as an example of what can be done to make shopping centers an attractive addition to any community.

Fitch: Struck me as particularly impressive for its unanimity and graceful simplicity.

A COMPREHENSIVE ARCHITECTURAL COMPETITION

The 1957 Honor Awards Program was held recently in San Francisco, sponsored by the Northern California Chapter of the American Institute of Architects in cooperation with four other A. I. A. chapters in the northern half of the state. The purpose of the competition was to determine the best buildings and planning projects, including interior design, which A. I. A. members had completed since January 1, 1950. The results of the project were organized into an exhibition shown at the De Young Museum.

The competition differed from previous contests in that the jury of awards was composed of only one practicing architect; the other four members being distinguished laymen. The reason being the belief of the sponsoring chapters that architecture is a social art which can best be evaluated in terms identified with individual members of society. This was reflected in the criteria which the Jury had been instructed to observe:

a. architecture's contribution to the dignity, exaltation, comfort and inspiration of the people who use and inhabit it

b. its embodiment and projection of our changing cultural and esthetic values

c. its mastery and recognition of our atomic age technology coupled with firm discipline of spiralling costs

d. its appropriateness to the community of which it is a part, and its recognition of the forces of growth and decay

The jury openly judged entries in all building type categories and voted on the best in the show. The top prizes were one award of great distinction and five awards of honor, and awards of merit from the large number of entries.

CHAPEL OF THE HOLY CROSS, SEDONA, ARIZONA—ANSHEN & ALLEN, ARCHITECTS

Oppenheimer: One of the great buildings of our time. Arrogant; bold disregard of the scenery. Results—quiet piety.

Belluschi: This chapel received a unanimous vote for an Award of Honor.

THE JURY:

ARCHITECT-CHAIRMAN: PIETRO BELLUSCHI, DEAN, SCHOOL OF ARCHITECTURE, MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

BUSINESSMAN-WRITER: EDGAR KAUFMANN JR., MEMBER OF THE BOARD OF DIRECTORS, MUSEUM OF MODERN ART, NEW YORK.

WRITER-CRITIC: JAMES M. FITCH, PROFESSOR, SCHOOL OF ARCHITECTURE, COLUMBIA UNIVERSITY.

SCULPTOR: HARRY BERTOIA, ARCHITECTURAL SCULPTOR (MANUFACTURERS' TRUST, M.I.T. CHAPEL, GENERAL MOTORS CENTER.)

SCIENTIST: DR. ROBERT OPPENHEIMER, DIRECTOR, INSTITUTE FOR ADVANCED STUDY, PRINCETON.

HOUSE IN BELVEDERE, EDWARD PAGE, ARCHITECT

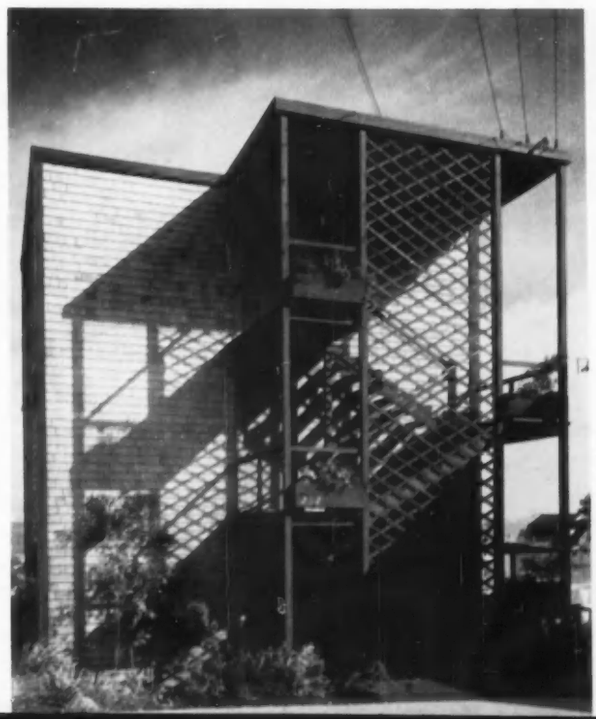
Belluschi: Really high level performance . . . straight forward structural system.

HOUSE IN SAUSALITO—JOHN CARL WARNECKE, ARCHITECT AWARD OF HONOR

Kaufmann: Architect made excellent use of natural beauty of area. Also, the clients in this area are a help to the architects.

SONOMA ELEMENTARY SCHOOL —MARIO CIAMPI, ARCHITECT (CITATION MADE FOR ART INTEGRATION—ANNE KNORR)

Belluschi: This is not, of course, the greatest art, but it is very useful and very gay. We must consider the environment we are creating for children. There is a trend towards more variety . . . more consideration for the children and the atmosphere in which they spend so much time.

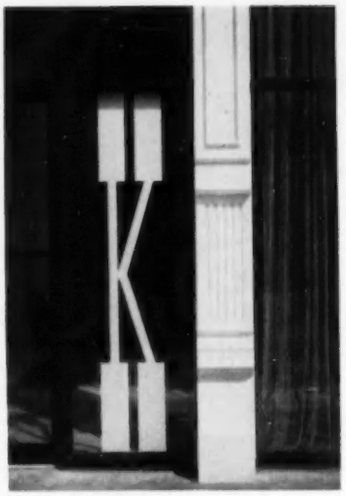


PHOTOGRAPH BY MORLEY BAER

STUDIO APARTMENTS, SAUSALITO—CAMPBELL AND WONG, ARCHITECTS

Belluschi: The Jurors were so careful in appraising the solving of problems in the face of reality. Everyone was very much taken by this project. Particularly after reading the explanation by the architect, as we did with all entries, we were in absolute accordance on this award. The tremendous low cost of the budget was carefully considered by the architects.

Fitch: It is commonly assumed that a large budget makes for good design, and scanty budgets produce mediocre results. This apartment building is more superior because of its low budget.



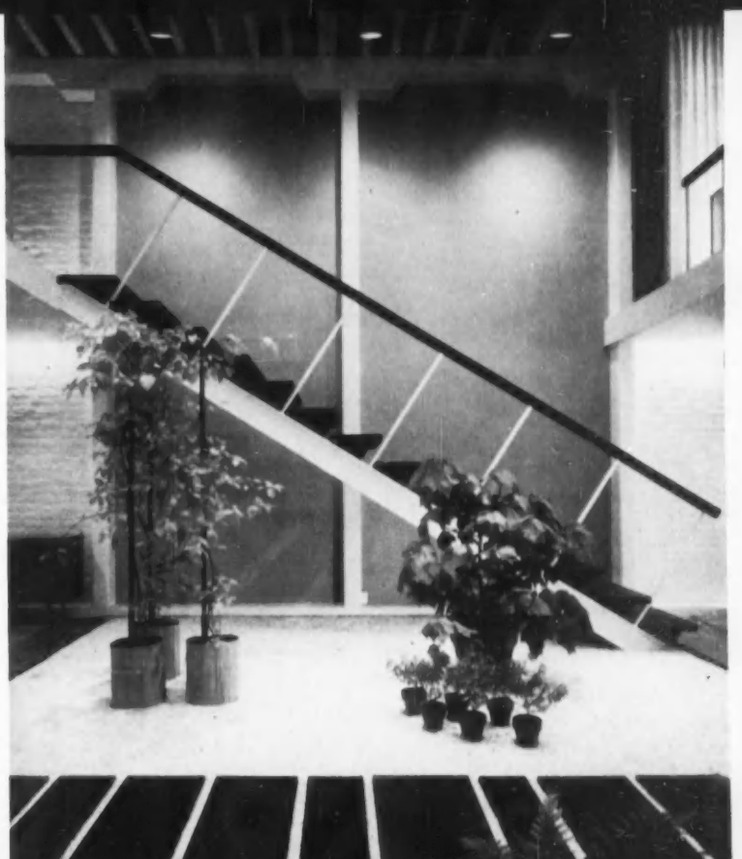
SHOWROOM FOR KNOLL ASSOCIATES, INC. BY FLORENCE KNOLL

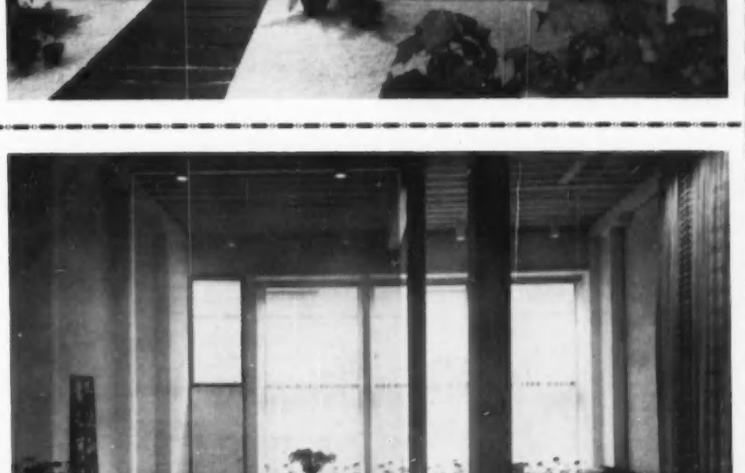
PHOTOGRAPHS BY MORLEY BAER

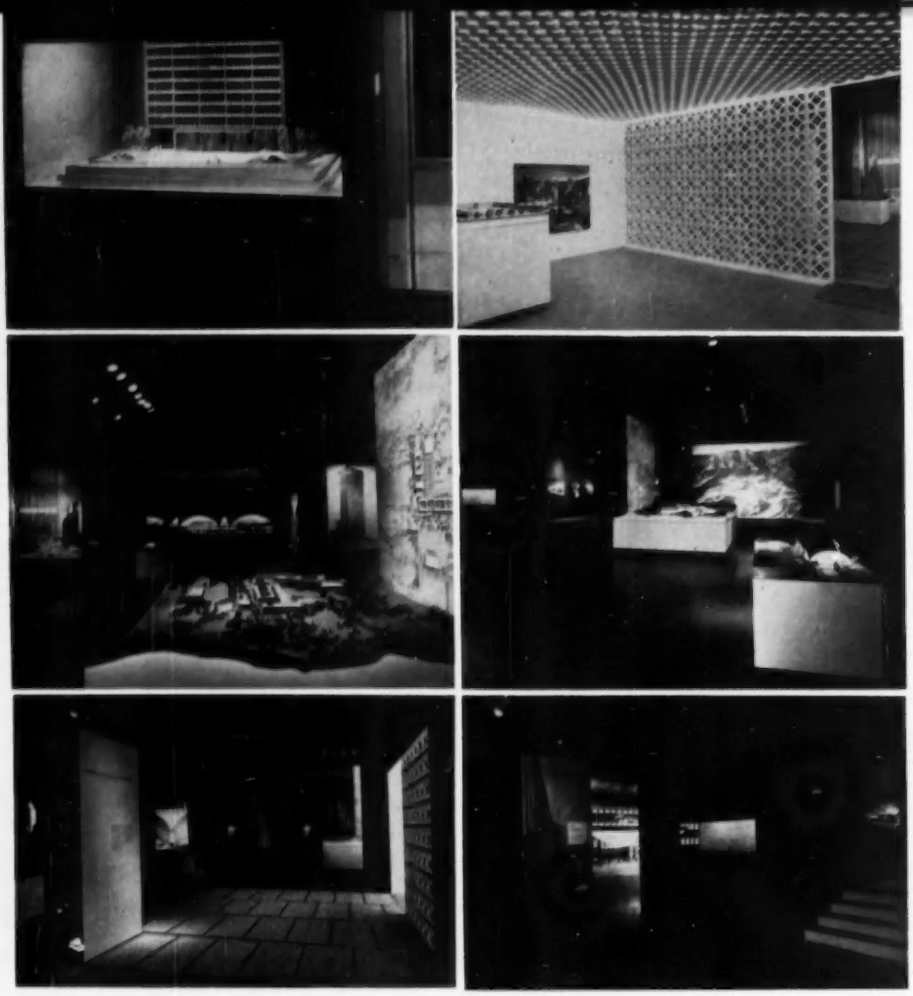
This latest showroom for Knoll Associates is a part of a progressive expansion program which, in the last sixteen years, has seen Knoll furniture and textiles displayed in eight cities in the United States and in fourteen countries on five continents. The old building on Montgomery Street, in San Francisco, dates to 1857. Originally, the "Golden Era Weekly" building, it had survived the San Francisco fire and earthquake and was used as a warehouse for many years. The showrooms occupy the first two floors.

The installation has been designed by Florence Knoll who has succeeded in retaining the original character of the building itself. In recreating the space to serve its new purpose, the building was stripped down to the "bones" of the structure. The supporting columns and beams of heavy mill construction have been exposed to become part of the decorative elements. The brick wall was left in its natural state and painted white. Colored panels added to the walls are patterned to fit into the architectural detailing. The building is long and narrow, and the problem of disproportionate space was compensated by the horizontal delineation of the balcony. The balcony floor is set above a transitional area of glistening marble chips and plants, which is opened up to serve as a traffic way with a walk of solid walnut planks embedded in the marble chips. The walls here are painted blue, and a free-floating staircase is formed of the same solid walnut planks, adding volume to the area. Strong emphasis is brought to focal areas through the use of colors of unmistakable clarity, blues, reds, and yellows that are carefully balanced with fabrics and woods of neutral tones and lively textures. Islands of color in the rugs are used to pace the area and to focus attention on the furniture groupings.

A handsome golden wall sculpture by Harry Bertoia is placed at the entrance. At the end of the showroom there is an important graphic display of textiles from the Knoll textile collection.







PHOTOGRAPHS BY ROLLIE MCKENNA

BUILDINGS FOR BUSINESS AND GOVERNMENT

AN EXHIBITION ARRANGED BY THE MUSEUM OF MODERN ART, NEW YORK

ARTHUR DREXLER: *"Modern architecture in the United States has begun to enjoy a new kind of patronage. Business and government alike are rediscovering the rewards of fine buiding, and the results can be seen not only in individual works of great beauty but in a generally higher standard of excellence.*

Among the major factors which contributed to this development were the enthusiastic reception given to some of Europe's outstanding architects and teachers, when they converged on this country in the years just before World War II; the related emergence of a younger generation of architects whose training has been free of eclectic prejudices; and the example of the recent work in America of Ludwig Mies van der Rohe.

But perhaps most important is the continuance of a building boom rivaled in size only by that in Latin America. The sheer quantity of building activity in the United States today has given architects a new freedom, and has disclosed to their clients unsuspected pleasures and possibilities. Indeed, it is a national enthusiasm for the act of building itself that is carrying architecture into livelier realms.

In the past, architectural adventures have been underwritten chiefly by private persons, responsible only to themselves. Important modern buildings have also been executed for universities and other institutions, and from time to time corporations, directed by men of unusual perception, have commissioned outstanding buildings for business and industry. Famous examples are the office building designed by Frank Lloyd Wright in 1938 for S. C. Johnson & Sons, and the laboratory tower added to it by Wright in 1949. Many other examples of intelligent support from business and institutions can be found in Wright's work alone, but today large architectural offices, as well as the rare genius, are receiving the support of informed, cooperative, and increasingly perceptive clients.

Government—both state and federal—has begun to discard its timid embarrassment before the heritage of European culture. Emboldened perhaps by its present role in world affairs, the United States no longer demands that major government commissions be executed in antique styles. The embassies being built abroad by the State Department, as part of a program which began in 1946, and the new Academy for the United States Air Force, look like what they are: modern American buildings.

Business organizations are now undertaking building programs that deliberately exceed strict utilitarian limits. Lever House in New York City, though it set a standard in its generous use of an urban site, was not an isolated example of socially constructive parti-

(Continued on page 32)

2 TECHNICAL CENTER FOR GENERAL MOTORS WARREN, MICHIGAN

EERO SAARINEN & ASSOCIATES, ARCHITECTS

SMITH, HINCHMAN & GRYLLS, ARCHITECTS-ENGINEERS

THOMAS D. CHURCH, EDWARD A. EICHSTEDT: LANDSCAPE CONSULTANTS

The General Motors Technical Center occupies 320 acres north of Detroit at Warren, Michigan. Since the company believes that research is of great importance to its development, the project was generously conceived and executed at a cost of over $100,000,000.

The staff of the Technical Center is divided into four distinct organizations, with a fifth devoted to Service. They are: Research; Process Development; Engineering; and the section in which automobiles are designed, called Styling. It was desired that each organization be given a building, or cluster of buildings, to itself. Widely dispersed around three sides of a 22-acre artificial lake, they have been related to each other by their modular construction. In general the buildings are long rectangles with north and south elevations composed of preassembled aluminum frames, ten feet wide and one story high. Into these frames are placed sheets of green-tinted glass and two-inch thick panels made of gray porcelain-enamelled steel bonded to honeycombed paper. All of these parts are composed on a basic five-foot module, applied alike to structure, partitions, lighting, heating, and ventilation. The repetitiveness of the modular rhythm, and the fact that a building might have been longer or shorter by a dozen bays without its essential effect being altered, have been made to contribute an element of surprise: the rhythm is stopped abruptly by end walls of brick glazed bright red, yellow, orange, or blue. Seen from a moving automobile, the modular ranges of glass and enamel and the shining brick walls are like sets of matched volumes braced by colored bookends.

Of the many details remarkable for their technical ingenuity, perhaps the most interesting is a flexible gasket of neoprene, such as is used in automobile and airplane windows. Fitted over the aluminum frames, it clamps the panels securely and makes a weathertight joint. Elegant and often beautiful, such details, together with exquisitely finished materials, suggest product design and manufacture as much as building. The architect has created an attractive environment that plainly belongs to that part of American society whose values are increasingly determined by manufacturing and marketing techniques. Although the architect's design produce effects unrelated to the company's products, the buildings are a celebration of mass production. As such they have more than architectural significance.

PHOTOGRAPH BY EZRA STOLLER

1

1 TERMINAL BUILDING FOR LAMBERT FIELD, ST. LOUIS

HELLMUTH, YAMASAKI AND LEINWEBER, ARCHITECTS

WILLIAM C. E. BECKER, STRUCTURAL ENGINEER

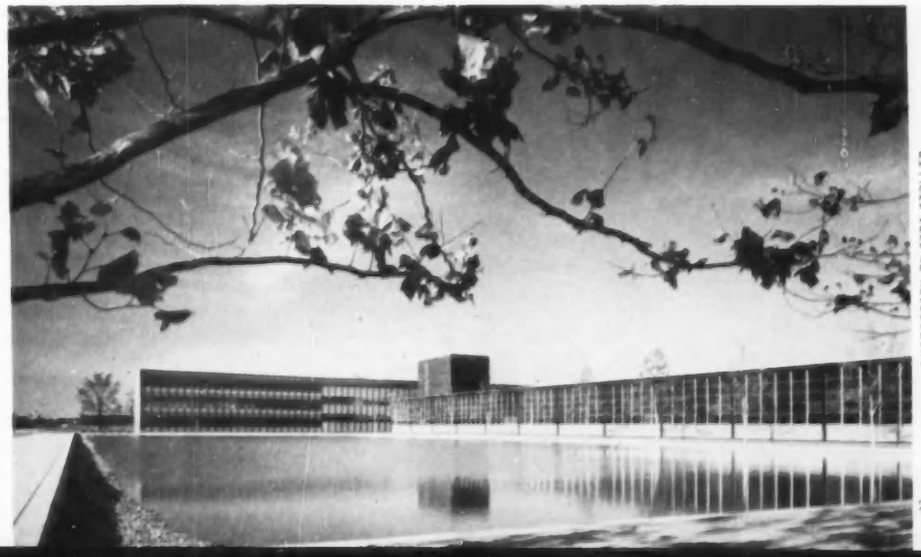
EDGARDO CONTINI AND ROBERTS & SCHAEFER, CONSULTING ENGINEERS

LANDRUM AND BROWN, AIRPORT CONSULTANTS

The architects' problem was to design a visually significant place of arrival and departure, easily seen from approaching automobiles and airplanes. Its shape might logically be related to the forms of certain kinds of airplane hangars. Its interior space had to provide a vantage point from which the activities of a busy airfield could be observed without the room itself being rendered insignificant. Perhaps the most difficult requirement, however, was that the building be conceived as an unfinished composition: its design had to allow for additions that would clarify and enhance the architects' conception rather than destroy it. To solve these problems Minoru Yamasaki chose plastic forms which are conspicuous from the air and which in profile dominate the horizon. In its present state the building consists of three pairs of intersecting barrel vaults made of concrete, four inches thick and sheathed with copper. These vaults spring directly from the floor of the main room, attaining a maximum height of 32 feet. Together the three pairs of vaults enclose a room 412 feet long. During this year an additional unit will be added on the east; at a later date two more will be added on the west, doubling the building's present size and making the rhythm of the vaults even more effective through repetition.

The open ends of the vaults are great windows focusing attention on the view and flooding the room with light. Tinted green to reduce glare, the windows are braced by mullions with cross-pieces set in arcs echoing the curves of the roof. Ticket counters, a bar and other service units are kept to a height of seven feet and are treated as individual buildings standing free of the glass walls. Because the site slopes, it was possible to place all service and traffic facilities on two lower floors while allowing arriving passengers to enter the main room at road level. Passengers take an escalator to the lower floors, where closed corridors lead them to within a few feet of waiting planes. The roofs of these corridors units are used as observation decks.

Although the subsidiary parts of the building are less imaginatively designed than the main room, and the relation of the rectangular ticket counter to the sweeping curves of the vaults is in some respects problematic, Lambert Field's terminal building is a work of architecture clearly organized and impressively beautiful, and it is a credit to the city of St. Louis.



PHOTOGRAPH BY EZRA STOLLER

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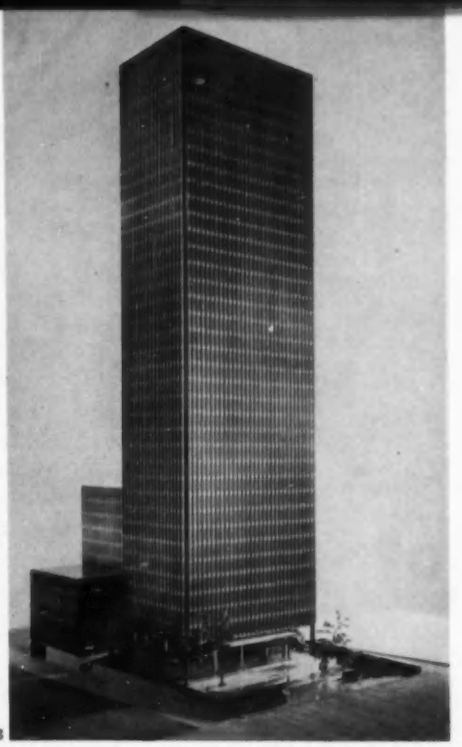

3

PHOTOGRAPH BY JOSEPH W. MOLITOR

3 OFFICE BUILDING FOR JOSEPH E. SEAGRAM & SONS 375 PARK AVENUE, NEW YORK CITY

MIES VAN DER ROHE AND PHILIP JOHNSON, ARCHITECTS

KAHN AND JACOBS, ASSOCIATE ARCHITECTS

Now under construction this is the first building in New York by Ludwig Mies van der Rohe. It is also the first opportunity Mies has had in the United States to execute a large building with the fine materials characteristic of his European work. Commissioned by Joseph E. Seagram & Sons, the building is a 38 story tower five bays wide and three deep, sheathed with gray-pink glass and hand-rubbed bronze mullions and spandrels. The long dimension of the tower parallels Park Avenue, facing a plaza approximately 100 by 200 feet, paved with pink granite. Formal pools on each side of the plaza, and a grove of beech trees on the north and south sides of the building, echo its symmetrical plan and elevations.

Students of his earlier work have been surprised by Mies' willingness to discard, where they prove unsuitable, such ideal

4 UNITED STATES AIR FORCE ACADEMY, COLORADO SPRINGS, COLORADO

SKIDMORE, OWINGS AND MERRILL, ARCHITECTS

DAN KILEY, LANDSCAPE ARCHITECT WELTON BECKET, PIETRO BELLUSCHI, ROY LARSON, EERO SAARINEN: CONSULTANTS TO THE AIR FORCE

Now in construction north of Colorado Springs, the new Air Force Academy will include housing, supporting facilities, and an airfield (although flying is not part of the cadets' curriculum). The Academy proper occupies roughly 400 acres of a 17,500 acre site. As a backdrop it has the Rampart Range of the Rocky Mountains on the west; the land slopes downward toward the east and south.

Six of the seven major buildings have been grouped on paved platforms modeled out of the site. Since the cadets march from building to building it was desirable that their quarters be centrally located. The Quarters building is in a sense the pivot of the com-

PHOTOGRAPH BY EZRA STOLLER

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position. It consists of two floors above and two floors below an open arcade, where the cadets are assembled and where supervisory offices are located. This building is 1,341 feet long, with the upper part divided into two sections by an open garden court. There are three interior courts with landscaped gardens and streams.

From the terrace fronting the Cadet Quarters, ramps and stairs lead up to the paved Court of Honor, bordered by the Administration building and the Social Hall, which includes an auditorium for 3,000. At the opposite end of the site, below, are the Dining Hall and the Academic building. The latter is divided vertically by a completely open floor, the lower part of the building, below the terrace level, containing approximately 200,000 square feet of laboratory space. The upper part, divided into two units, is devoted to classrooms and to the Library. The Dining Hall is a square building with two acres of roof supported on 16 columns. 3,000 people can be seated at one serving.

Adjacent to the Court of Honor will be the Chapel. This building is intended to provide a focal point for the entire group. Now in process of design, it is planned to contain one chapel each for Protestants, Catholics, and other faiths. Acoustic controls will allow the three chapels to be used simultaneously. The approximate dimensions of a building in which this may be done are roughly 280 feet in length, 84 feet in width and 106 feet in height. The Chapel is being designed to heighten the linear and generally flat character of the structural idiom, rather than to oppose it with a contrasting sculptural form.

Without sacrificing variety in the design of individual buildings and their groupings, architects Walter Netsch and Gordon Bunshaft have given the entire composition a unity difficult to achieve on so large a scale.

forms as the pure rectangular tower, while at the same time insisting on absolute integrity of structural expression. Thus, the tower is an undifferentiated space on a bay module of 27 feet in both directions, but where the program required unusually large rooms Mies did not attempt to fit them into this module. Instead they are treated as low auxiliary masses flanking the tower at the rear, and the rectangle of the tower itself is broken by the projection on the rear of an extra bay. This arrangement compensates for the loss of office space within the rectangle to elevators and services, while at the same time preserving the classic ratio of 3:5 on which the tower is based.

The Seagram building is Mies' most powerful expression of a theme first stated in his twin glass and steel apartment towers in Chicago, in 1951. In this conception of the tall building vertical continuity is stressed by placing the mullions, which brace the glass walls, on the exterior of the building so that they sweep from top to bottom in unbroken lines. Only the floor slabs behind them provide horizontal contrast. In the spacing and proportioning of these elements, Mies articulates structure with an unsurpassed precision. The mullion detail in particular may be compared with the delicate adjustments of line and shadow characteristic of the Ionic column.

5 UNITED STATES EMBASSY FOR NEW DELHI

EDWARD D. STONE, ARCHITECT

STANLEY M. TORKELSEN; LLOYD FLOOD; RICHARD W. SNIBBE, ASSOCIATES

PETER W. BRUDER, ENGINEER

This building is one of a series commissioned during the last ten years by the Foreign Buildings Operations of the Department of State. Standing on a platform 80′x380′, the two main floors, largely glass walled, are protected from India's sun by a continuous grille of pierced terra cotta tile. This grille will reduce the heat load on air-conditioning, as will the overhanging extra roof serving as a parasol three feet above the building proper. Projecting well beyond the grille, the parasol roof is supported at its perimeter by slender gold-colored steel columns, and perforated along its edge to cast lines of light on the richly shadowed tile. Offices and reception rooms are grouped around a shallow pool, in which stepping stones lead to tree-shaded islands. The entire patio is open to the sky but shaded from the sun by a suspended mesh ceiling of aluminum discs anodized gold. In wet weather visitors may enter the building through a garage inside the platform, where service and storage facilities are also housed.

Clear organization of its various elements gives this building much of its distinction. The choice of materials and colors, and the architect's intelligent adaptation of such locally traditional amenities as pools and pierced tile walls, give it an atmosphere appropriate to its purpose.

6 OFFICE BUILDING FOR CHASE MANHATTAN BANK, NEW YORK CITY

SKIDMORE, OWINGS AND MERRILL, ARCHITECTS

Commissioned by the Chase Manhattan Bank, the building is a narrow 60 story tower adroity slipped into the crowded Wall Street area. The site comprises two long narrow blocks, one of which is partially occupied by another building. The architects have faced the tower north and south, using the half-block for a plaza. This was made possible by an agreement with the city, whereby the owners relinquished seven to 15 feet on all sides of the site to widen the sidewalks, in return for the right to incorporate Cedar Street in the area given over to the plaza. The result is a free-standing tower and a bright paved space decorated with trees and sculpture.

On the building's perimeter columns measuring 3′x5′ are placed outside the wall, an arrangement which releases floor space within. It also provides emphatically vertical elevations, punctuated by three horizontal bands indicating floors of mechanical equipment. The walls are of glass; columns and spandrels will be sheathed in stainless steel or aluminum.

PHOTOGRAPH BY LOUIS CHECKMAN

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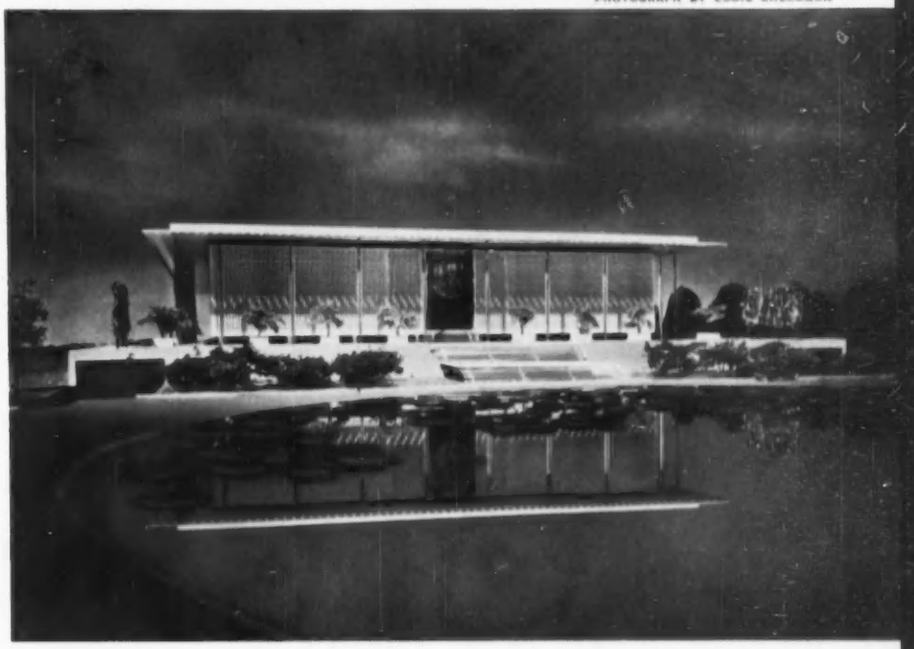

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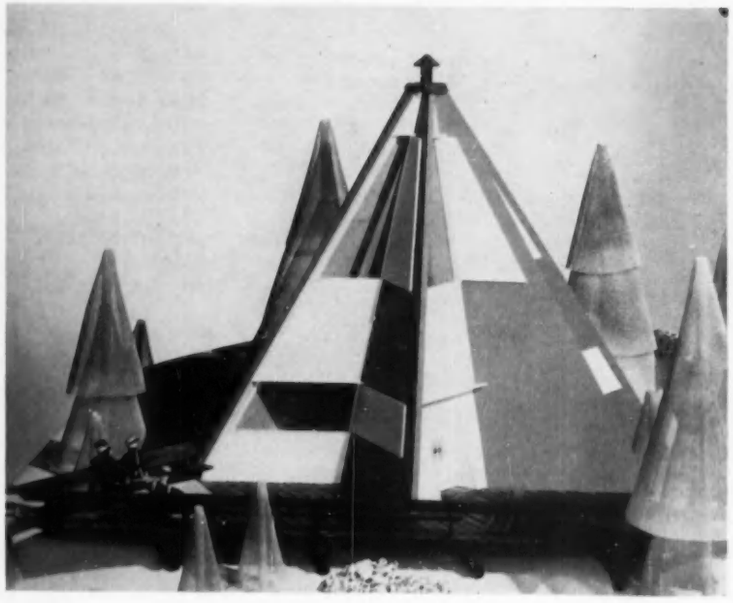
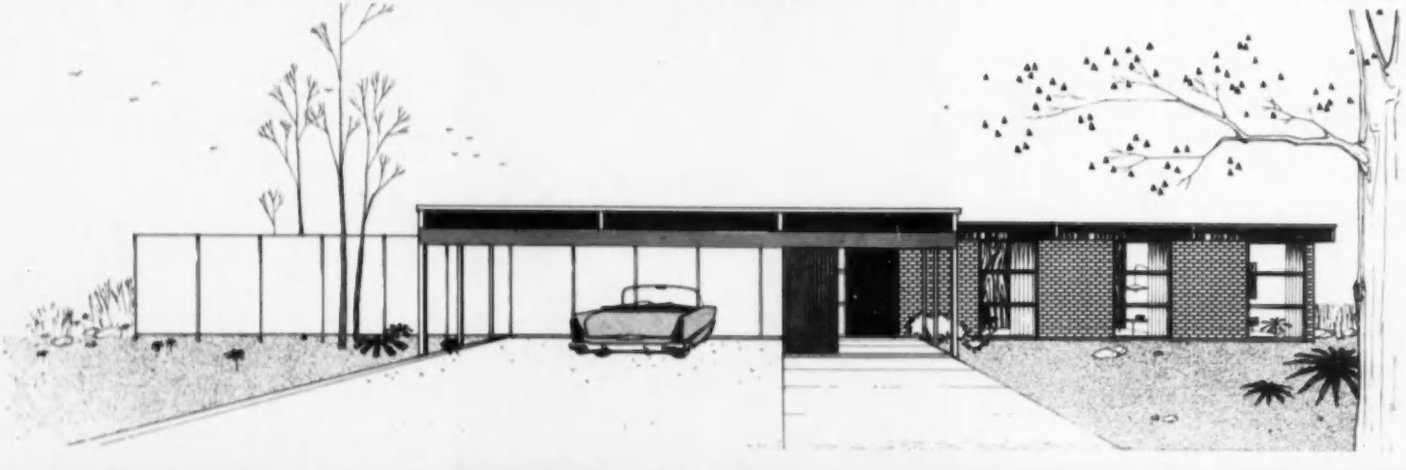
PHOTOGRAPH BY EZRA STOLLER

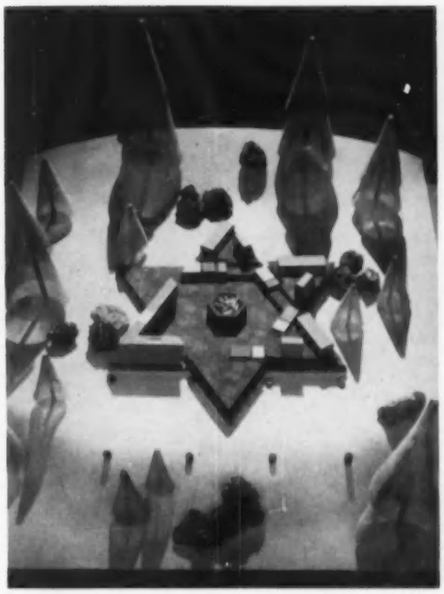
A STONE AND PLYWOOD SKI LODGE



HOUSE BY LOUIS H.



BY CAMPBELL AND WONG



This star-shaped structure is designed primarily for winter use as a ski lodge, but it would be equally pleasant for summer vacationing.

The plan includes three bedrooms, kitchen, bath, entrance area and most important, a large central lounge area with all the aforementioned facilities opening on to this area. The center is dominated by a large fireplace of stone rising out of the stone floor and being surrounded with stone sitting steps which also give access to the other rooms.

The arrangement of the windows in this structure is such that one can see out from at least four or five sides but at the same time have a feeling of security and enclosure.

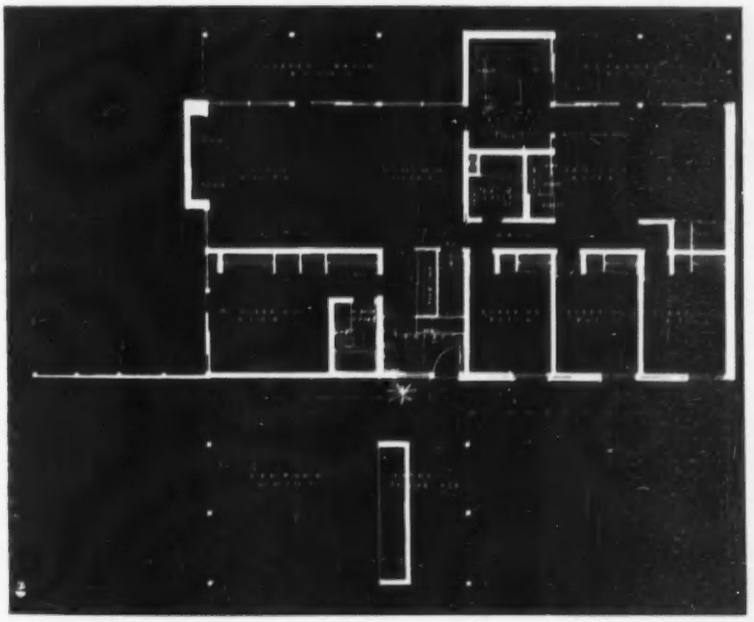
The structure itself is basically large plywood triangular-shaped rigid panels joined by metal at the top, the remaining area being filled in with glass and plywood dividers.

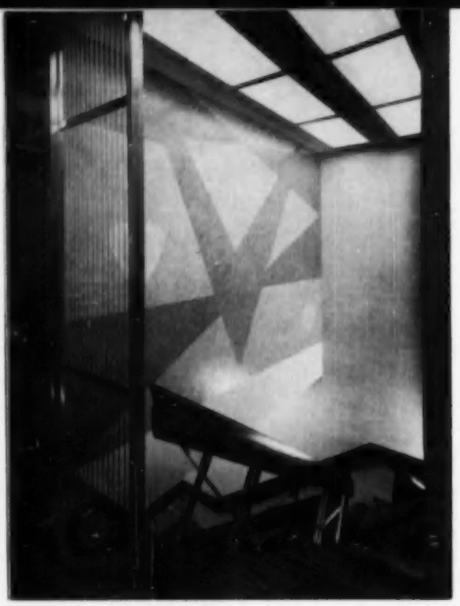
The star plan and great tree-like height are done purposely to create an atmosphere of festive vacationing emphasizing the sense of being in a new and fresh environment—at least for a weekend.

HUEBNER, ARCHITECT

This house has been designed as a simple rectangle with both formal and informal living areas. The large glass area will face south on a site approximately 150 feet wide and 290 feet deep with stands of oak and maple trees. An 8-foot roof over the rear porch will protect the glass areas of the house from the hot summer sun. A built-up tar and gravel flat roof will have one inch of rigid insulation, the exterior walls having two inches of rock wool insulation. 3"x12" laminated beams will be of select fir, stained to match the walnut used throughout the interior of the house.

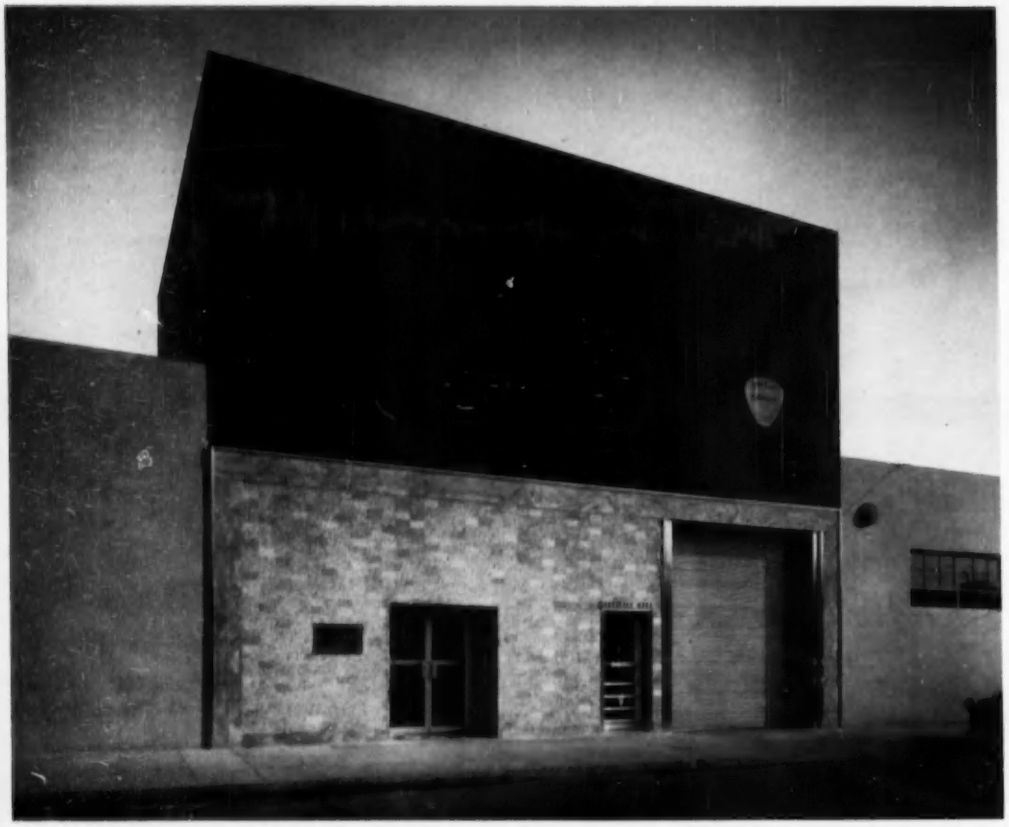
In plan it is possible to shut off the family room and the three children's bedrooms in order to give both parents and children privacy when desired. The windows are aluminum sash awning type, with some areas served by sliding glass doors. There will be a two-car carport and a covered walk leading to the entrance. A full basement has been provided. Formal living areas will have carpet over wood flooring, informal areas will be cork. Exterior walls will be built of gray cement brick, interior walls will be walnut panels and white plaster. The entire house has been designed on a ten-foot module.





LOBBY — CLOSE-UP OF ITALIAN GLASS MOSAIC MURAL designed by Paul Laszlo, A.S.I.D.
Handrail—teakwood, dark brown stained and polished.
Floor—terrazzo, black and white.
Tile wall—Pomona tile bevel, light gray.
Steps—terrazzo.
Ceiling — acoustical tile—Acousti-Celotex, random pattern.
All recessed lighting fixtures —Sunbeam Lighting Co.

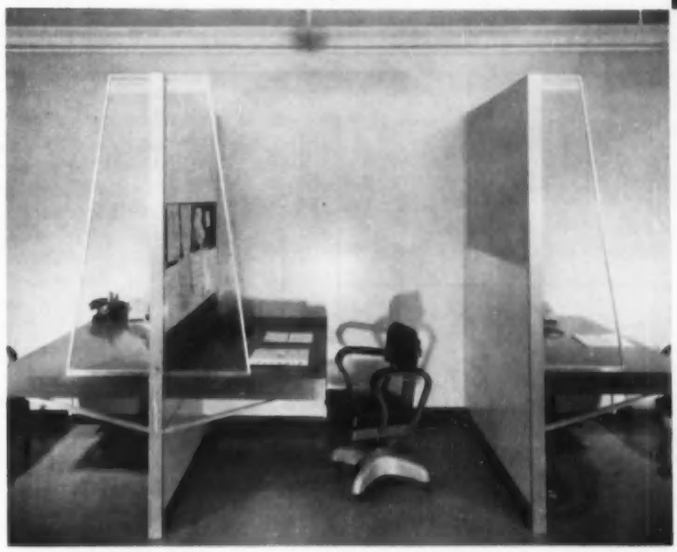
EXECUTIVE OFFICE
Floor—Nye-Wait "Coronia" —cocoa brown and yellow.
Walls—wood paneling, walnut, bleached and polished (by U.S. Plywood).
Paneling behind planting—white Micarta.
Ceiling—acoustical tile, Fiberglas, Stria (Owens-Corning Fiberglas Co.)
Desks—bleached walnut, with stainless steel undercarriage; sand-colored leather tops; pull-outs covered with white Micarta (by U.S. Plywood).
Coffee Table—bleached walnut, sand-colored leather top.
Sofa and Easy Chairs—bleached walnut; upholstery —U.S. Koylon foam rubber; covered with handloomed fabric, beige with dark brown.



FRONT ENTRANCE
Fulget tile with marble.
Entrance doors—Kawneer.
Upper part—black Zourite.

VIEW OF HALLWAY
Floor — Robbins vinyl tile, gray marble.
Walls—light gray and light blue Marlite.

PHOTOGRAPHS BY ROBERT C. CLEVELAND
"D.CK" WHITTINGTON



SALES ENGINEERING OFFICES

Floor — Robbins vinyl terra-tile gray.
Walls — Marlite Plank mist gray.
Ceiling — acoustical tile — Acousti-Celotex.
Desks — Micarta (by U. S. Plywood) with stainless steel metal standards, and wire glass partitions; walls of Marlite and Acousti-Celotex.

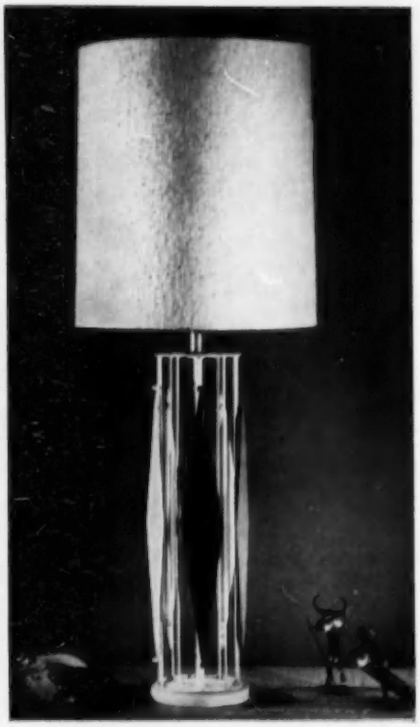
REHABILITATED COMMERCIAL BUILDING

BY PAUL LASZLO, A.S.I.D.

In this project for rejuvenating an administrative building the problem was the organization of the office suites and showrooms on the second floor within a space of 40′ in width and 160′ in depth, and to provide a main floor with main entrance, lobby with secretary's reception desk, office for receiving clerk, and a staircase. The designer injected a welcome liveliness with the combined use of materials like Marlite, Micarta, and Italian glass mosaic mural. The use of luxurious materials communicates a sense of comfort and elegance to what is essentially a very functional layout. Fulget tile was specified for the front and reeded tile on the stair hall walls, making a very effective contrast to the black terrazzo on the floor.

The executive suite was designed so that the close communication of the three partners is maintained without sacrificing visual separation and spaciousness. Since the remodeled building is for a manufacturer of lighting fixtures, it was very important to have these fixtures integrated in the design of the interior. Laszlo has made appropriate use of these elements by fully exploiting the decorative and functional possibilities of the firm's products in the design of all the offices so that the building serves as a subtle showroom. All the furniture was designed by Paul Laszlo. The entire building is air conditioned.

TONY HILL CERAMICS • 3121 WEST JEFFERSON • LOS ANGELES 16



Enamelled metal cage
with diamond shapes
choice of color
44"tall
retail price
approximately $45

CONCRETE SHELL FORMS—CANDELA

(Continued from Page 19)

form had yet to be exploited.

Candela educated his senses in direct observation and reasoning, and his writings are filled with references to the superiority of the intuitive approach over handbook engineering methods. "What we need is a structure, not an analysis," he quotes from H. Cross. An observation of the Spanish philosopher, Ortega y Gasset, served as a guiding principle. "Science likes abstractions, and abstractions are always clear. The essential confusion is the concrete vital reality, which is always unique."

In 1939 Candela, a supporter of the Republican Government in Spain, and an architect serving with its army, found it necessary to leave his country, and he went to Mexico to live. There, he says, he threw aside his scruples and made a start building some catenary-shaped cylindrical vaults.

"A picture of the reinforcement of Maillart's shell at the Zurich Exposition gave me a hint of the real behaviour of such vaults," he reports.

He executed three shells before the important Cosmic Ray Pavilion, and since then he has designed and built all the various types. His preference for hyperbolic paraboloids is based on their superior economy, but he has executed folded slabs, undulating shells, short and long cylindrical shells, revolution and elliptical domes, and conoids.

Experience has strengthened his belief that the difficult analytical calculations which are still considered necessary to the design of the shell are a myth, born of a blind faith in mathematics.

In the practical world of building the mathematician's truth has proved to be a fallacy. Too many factors are not taken into account; he cites as some the contractions of concrete during curing, temperature differences between points on the structure, and the uneven settling of the foundations due to the fact that construction crews cannot work to a close tolerance. Since extensive analyses can yield only approximate information, and add considerably to the cost, he looks upon them as economically unjustified.

The Iglesia de la Virgen Milagrosa was designed in one week, and an analysis conducted later only as a check.

Had not the art of building made a good account of itself in earlier eras? "The imposing stone vaults ot the Gothic cathedrals, and the daring domes of the Renaissance were built without the help of differential calculus but, instead, with a great sense of equilibrium and sound judgment of the play of forces, qualities more necessary indeed to the real builder than full knowledge of mathematical intricacies."

Candela builds no models of his work simply because it is practically impossible to reproduce the real conditions. His models are all carried out life-size.

The Iglesia de la Virgen Milagrosa was the first structure in which Candela had an opportunity to fuse his talents as architect and engineer. An authentic architecture, it blooms out of its own internal order, revealing the mysterious connection between the laws of physics and our esthetic sensibility.

Structurally, it is a series of hyperbolic paraboloidical shells of two heights. Visually it is sculpture of a rich complexity. It has the fancifulness of a flock of Japanese paper birds, but the poetry of its form was conceived as structure not as sculpture.

The logic of the plan is responsible for the lower shells which roof the chapel, at the right of the entrance to the nave. But by introducing smaller forms he has scaled down a portion to the size of man, and the effect is one of measuring his everyday height against his aspirations.

The spirit of the Gothic, which has eluded architects who set out to copy its outwardness, appeared magically for Candela, whose purpose was not to create a style face but to make use of his experiments in shell forms in terms of traditional eccleastical architecture. The commission was awarded him in the first place because he builds more economically than any other architect in Mexico today.

In all of Candela's work design and construction are one and the same. It is in the separation of these two that we have sacrificed, he believes, "an intimate combination between structure and expression," which was present in the building of the Middle Ages.

"The professions of architect and engineer were one and the same long ago, and then the title of 'Master Builder' had real significance, but since then their interests have become separate, and in the past century the breach has widened to create a no-man's land on which few dared to walk with assurance. However, on a few occasions someone with sufficient talent and decision has taken his stand there with authority—Maillart and Nervi from one field, and Nowicki and at times Wright from another—and the results have been so extraordinary that one is led seriously to believe that there, finally, lies the looked-for solution to the fundamental problems of our age."

Of this we can be certain: Felix Candela has narrowed that field, to give us some of the most imaginative work of our day, shells of concrete so thin that they appear to have their origin not in engineering but in nature.

Man is capable of many kinds of bravery: the least noted of these are the new structures he builds.

ESTHER McCOY

BUILDINGS FOR BUSINESS AND GOVERNMENT—DREXLER

(Continued from Page 24)

citation by the client. Such participation may take many forms. The conspicuous expenditures by which Renaissance patrons outdid each other were naturally dependent on what was most difficult to obtain: fine materials, the best craftsmanship, and good sculpture, paintings, and decoration. Today's most valuable substance is space. In the present condition of our cities the use to which land is put is a decisive factor in architectural quality. Releasing part of a site so that it may be used as open space allows light and air to penetrate narrow streets, and makes it possible to see the buildings—a consideration of some importance if we are to have architecture at all.

Sculpture and painting have not become as much a part of modern architecture as many people would like them to be. Merely to install a sculpture, however large, is not enough. Its successful relation to the building, unless it is structurally self-evident, must depend on the exact coincidence of the architect's and the sculptor's intentions. As an alternative the architect may

(Continued on Page 33)

execute the sculpture himself, as Mies van der Rohe proposes to do for the Seagram building.

Beautiful materials do not in themselves guarantee beautiful architecture. But a more generous investment in good materials (which sometimes have the advantage of economy through easier maintenance) is a method of enhancing architecture no less valid today than it was centuries ago. Happily our buildings are beginning to benefit from the attention to materials lavished on the automobile and other industrial products.

Of the six projects in this exhibition, the buildings for Joseph E. Seagram & Sons and the Chase Manhattan Bank are located in crowded urban areas; the St. Louis airport terminal serves as an entrance to the city. Each of them makes an important contribution to its immediate environment. But their individual merits, isolated in the disordered urban scene, emphasize the potential advantages of coordinated city planning. Some of these advantages may be inferred from the rational organization of the United States Air Force Academy and the General Motors Technical Center, which are almost small cities in themselves.

The concern with esthetic and social values exhibited by business is not in itself new. It denotes rather a shift in emphasis: clients are becoming patrons."

BOOKS

ROBERT WETTERAU

MEN AND MONUMENTS, by Janet Flanner (Harper & Brothers, $5.00).

Janet Flanner has long been one of our favorite reporters. Her precise, swift-moving correspondence — studies — profiles, signed Genêt, in the NEW YORKER (her articles have appeared in that magazine from its inception) have always been models of accurate reporting combined with bright, good writing. Her years of living in France have put her close to people, art and politics and of them she writes artlessly and well.

In MEN AND MONUMENTS there is a long article on André Malraux, that man of many hats: adventurer, novelist, soldier, politician, art theoretician and man of mystery (he is as obscure as T. E. Lawrence). A sharp silhouette of an extraordinary man.

There are full-length portraits of Matisse, Braque and Picasso, and to demonstrate Miss Flanner's descriptive abilities in a passage from her chapter called KING OF THE WILD BEASTS, she writes of Matisse architecturally:

"In his eighty-second year, three years before his death, Matisse was still an impressive figure. When he stood by his easel or rose from his chair to greet a visitor, he looked like a massive, well-preserved ruin, like an important structure that had been undermined mostly by the weight of time, but the upper and lower stories —his heavy torso, his dwindling limbs — maintained a precarious balance, with some inner girders of willpower holding the whole together. From the drapery of his pale silk painting jacket and the winding woolen scarf around his throat emerged his ovoid head, with its short white trimming of hair and beard, its amazingly lively pink skin, its shadowed, harsh, straight crease of mouth above a full, sensitive lower lip, with the watchful blue-gray eyes visible only as blurs behind the thick fenestration of his spectacles."

The profiles of Braque and Picasso are well-drawn, too, and of Braque Miss Flanner writes with especial warmth. Her compact prose states as much about each artist as is said in many a full-length book.

Her final chapter is on the Hitler-Göring looting and pillaging of art treasures during the last war, when an estimated 21,903 paintings, drawings and objects of art were taken out of France alone. The total value of all paintings and valuables looted by the Germans from various countries and stored in out-of-the-way salt mines and such, reached staggering proportions, and Miss Flanner's account of how these treasures were finally rescued and restored by members of the art commission of SHAEF should not be missed. "Art must be the most precious property mankind ever invented, because it is always the first thing civilized man steals and sends home."

THE IMPRESSIONISTS AND THEIR WORLD, with an introduction by Basil Taylor (Pitman Publishing Corporation, $5.50).

This gallery is really a bargain at the low price of $5.50. There are 96 large plates, 48 of them in full color. Here are 8 examples each of the paintings of Manet, Monet, Pissaro, Sisley, Renoir, Degas, Cezanne, Gauguin, Van Gogh, Toulouse-Lautrec, Seurat; 4 plates each of Redon and Rousseau. The excellent reproductions were made by C. J. Bucher AG in Switzerland and represent not only the favorites but some not-so-often published works of the Impressionists and post-Impressionists. Mr. Taylor's text, with a nod to John Rewald, briefly and satisfactorily introduces this popular school of painting, and includes short biographies, and bibliography, and a note on each painting.

ARCHITECTURAL BOOKS

Architecture As Space: How to Look at Architecture
by Bruno Zevi

In a magnificent series of photographs, drawings and plans, and in the illuminating text, we learn of the significance of space within enclosure in Ancient Greece and Rome. Byzantine and Gothic, Renaissance and Baroque become vibrant realities in living terms. Space as a concept through the ages right up to organic architecture in our own day becomes a vivid experience, meaningful to us every time we look at a house or building in our own environment.

$7.50

Toward New Towns for America
by Clarence S. Stein

This pioneer planner for over 30 years has written a book that shows how man—usually the forgotten element in planning—should be the focal element in all planning of towns and housing developments. Lewis Mumford says 'No book in this field could be more pertinent to our task or more salutary.'

$10.00

Ladengestaltung: Shop Design
by Robert Gutmann and Alexander Koch

275 illustrations and 54 plans show noteworthy demonstrations of good design for successful merchandising in various types of supermarkets, clothing and shoe shops, travel bureaus, department stores adn shopping centers, with emphasis upon spacious planning and the integration of shop to street and community. Solutions to problems in relationship to local conditions are shown.

$12.50

Perspective: A New System for Designers
by Jay Doblin

Eliminating complex mechanical drawing and offering a simpler method of visualizing three-dimensional objects accurately and quickly, Jay Doblin's new book is particularly helpful to students, draughtsmen and architects. Well-illustrated with large, clear reverse plates.

$5.00

The New Landscape in Art and Science
by Gyorgy Kepes

Deals with the fundamental problems of visual expression in their changing relations to the new aspects of nature revealed to us through recent scientific and technological developments. With over 450 superb illustrations in black and white—some in color—of painting, sculpture, architecture, crafts, etc., from pre-historic times down to the present.

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CURRENTLY AVAILABLE PRODUCT LITERATURE AND INFORMATION

Editor's Note: This is a classified review of currently available manufacturers' literature and product information. To obtain a copy of any piece of literature or information regarding any product, list the number which precedes it on the coupon which appears below, giving your name, address, and occupation. Return the coupon to Arts & Architecture and your requests will be filled as rapidly as possible. Items preceded by a check (✔) indicate products which have been merit specified for the new Case Study House 17.

INTERIOR DECORATION—HOME STUDY

(8285) Approved supervised home study training in all phases of interior decoration. Ideal supplementary course for architects, builders, designers. No classes. No wasted time. Text and work kit furnished. Low tuition payments. Send for free booklet. Chicago School of Interior Decoration, Dept. 8285, 835 Diversey Parkway, Chicago 14, Ill.

NEW THIS MONTH

(302a) Decorative Building Tile: Italian marble spheroids are machine pressed into channeled cement units to make Fulget mosaic tiles. Available in three forms, Wall tiles, Rizzada and Pavimento. Wall tiles 4¾" x 9½" come in 20 basic marbles, polished or natural, colored glass or mother of pearl. Rizzada 8" x 16" comes in 8 marbles, natural finish. Pavimento 16" x 16" is flush finish, suitable for flooring. The tiles are frost and heat resistant, stones will not crack and loosen even under extreme conditions. Imported and distributed solely by the Fred Dean Company, 916 La Cienega Blvd., Los Angeles, Calif.

APPLIANCES

(292a) Built-in Ranges and Ovens: Latest developments in built-in Ovens with Glide-out Broiler, also motorized Rotisserie. Table top cook top ranges (4 or 6 burners) ready for smart built-in installation. Available in colors or stainless steel to provide sparkling interest in spacious contemporary kitchens. Send for color brochure, photos, and specifications. Western-Holly Appliance Company, 8536 Hays Street, Culver City, California.

✔(250a) Built-in appliances: Oven unit, surface-cooking unit, dishwasher, food waste disposer, water heater, 25" washer, refrigerator and freezer are featured built-in appliances merit specified for Case Study House No. 17. Recent introductions are three budget priced appliances, an economy dryer, a 12½ cubic ft. freeze chest and a 30" range. For complete details write Westinghouse Electric Supply Co., Dept. AA, 4601 So. Boyle Ave., Los Angeles 58, Calif.

ARCHITECTURAL METAL WORK

(294a) Architectural Interior Metal Work and Custom Lighting Fixtures: Specializing in the design and fabrication of decorative metal work, murals, contemporary lighting fixtures and planning, room dividers, and decorative fixtures of all types for stores, office buildings, restaurants, cocktail lounges, hotels and homes. Sculptured metals, tropical hardwoods, mosaics, glass and plastics are used in the fabrication of these designs. Send for information and sample decorative plastic kit, Strickley & Company, 711 South Grandview Street, Los Angeles 57, California.

ARCHITECTURAL WOODWORK

(295a) Manufacturers of architectural woodwork, specializing in all types of fixtures for stores, offices, churches and banks. Large and complete shop facilities offer a complete range of work from small specialty shops to complete departments in large stores. Experienced staff to discuss technical or structural problems, and to render information. Laurel Line Products, 1864 W. Washington Blvd., Los Angeles 7, California.

DECORATIVE ACCESSORIES

(426) Contemporary Clocks and Accessories: New collection of 8 easily mounted weather vanes, traditional and modern designs by George Nelson. Attractive folder Chronopak contemporary clocks, crisp, simple, unusual models; modern fireplace accessories; lastex wire lamps, and bubble lamps, George Nelson, designer. Brochure available. One of the finest sources of information, worth study and file space. —Howard Miller Clock Co., Zeeland, Mich.

(252a) Stained Glass Windows: 1" to 2" thick chipped colored glass embedded in cement reinforced with steel bars. A new conception of glass colored in the mass displays decomposing and refracting lights. Design from the pure abstract to figurative modern in the tradition of 12th century stained glass. For brochure write to Roger Darricarrere, Dept. AA, 8030 W. 3rd St., Los Angeles, Calif.

(122a) Contemporary Ceramics: Information, prices, catalog contemporary ceramics by Tony Hill, includes full range table pieces, vases, ash trays, lamps, specialties; colorful, full fired, original; among best glazes in industry; merit specified several times CSHouse Program magazine Arts & Architecture; data belong in all contemporary files. —Tony Hill, 3121 West Jefferson Boulevard, Los Angeles, California.

✔(137a) Contemporary Architectural Pottery: Information, illustrative matter, excellent line of contemporary architectural pottery designed by John Follis and Rex Goode; large man-height pots, broad and flat garden spots; mounted on variety of black iron tripod stands; clean, strong designs; data belongs in all files.—Architectural Pottery, Box 24664 Village Station, Los Angeles 24, California.

(281a) Mosaics: Studio workshop offers complete line of contemporary custom mosaic table tops, mosaic murals, architectural sculpture, contemporary furniture, special leather and brass. Original designs. Maurice Bailey Designs, 968 North La Cienega Blvd., Los Angeles 46, California. Phone: OLeander 5-8658.

FABRICS

(171a) Contemporary Fabrics: Information one of best lines contemporary fabrics by pioneer designer Angelo Testa. Includes hand prints on cottons and sheers, woven design and corre-

BOOKS

(Continued from Page 33)

AN APPROACH TO PAUL KLEE, by Nika Hulton (Pitman Publishing Corporation, $4.95).

It is unfortunate that the reproductions of Klee's work in Mrs. Hulton's book are so muddy, for her excellent collection contains examples from all Klee's important periods from 1905 to 1938. Mrs. Hulton traces the social and environmental factors which influenced his art from childhood through the war years, the Bauhaus Period, his fatal illness, and stresses the intuitive approach to the appreciation of Klee's art. A sensitive, unprofessional understanding.

CHAGALL, with biographical and critical study by Lionello Venturi (Skira, Inc., $5.75).

In Mr. Venturi's enthusiastic analysis of Chagall's topsy-turvy and mythic world, he states that one of the distinctive features of his art is "the poetic intermingling of dream and reality." And again, "His universe is a transcendental one and accordingly rich in myths, for his airborne human beings, animals and monsters, are nothing else but myths, or at least have all the makings of them." To further understand Chagall's magic and charming world we are given insights into his Hassidic mystique, in which the irrational becomes significant when combined with everyday elements. Chagall's whole range is shown in the 53 colorplates: joyous levitation, sorrow, death, his obsessions, his many surprises; always in marvelous color and energy. The book is complete with a chronological survey, a study of Chagall's background, and a bibliography. Recommended.

THE ART OF ARCHITECTURE, by A. E. Richardson and Hector O. Corfiato (Philosophical Library, $25.00).

Unlike Sir Bannister Fletcher's HISTORY OF ARCHITECTURE ON THE COMPARATIVE METHOD, this book makes no comprehensive survey of building through the ages, but rather attempts a study of "the basic laws of architectural design." The first section of 256 pages deals with the state of architecture from earliest time to present day; the second section gives an account of decorative composition, in 190 pages, to complete the synopsis. The book's best features are the 513 photographs and 153 plans and line drawings, making it a valuable pictorial summary of architectural composition old and new.

SCHOOL PLANNING AND BUILDING HANDBOOK, by N. L. Engelhardt, N. L. Engelhardt, Jr., and Stanton Leggett (F. W. Dodge Corporation, $12.75).

A comprehensive research study incorporating a vast collection of data necessary to the solution of school building programs in a fast-growing population. The authors have consulted with 85 planners, engineers, school boards, architects, editors, superintendents and administrative officials, whose aims are to assist in the building of more satisfactory schools. Engelhardt and Leggett have written ten books on the planning and building of schools and are well acquainted with all the complexities. A practical handbook for all concerned.

COURSE IN PENCIL SKETCHING, by Ernest W. Watson. Book I. BUILDINGS AND STREETS. Book II. TREES AND LANDSCAPES. Book III. BOATS AND HARBORS (Reinhold Publishing Corporation, each volume, $2.50).

In these three books designed for the student-artist Mr. Watson has chosen a teaching method similar to his drawing courses given at Pratt Institute, New York, for many years, and he is an expert at demonstration in combination with verbal instruction. He discusses at length the proper tools, the correct papers, pencils, their handling and relationships; the different ways of rendering different materials and objects, with studies in composition and all its ramifications. A master of broad stroke pencil technique, Mr. Watson employs the very selective photographs of Samuel Chamberlain to illustrate his texts in juxtaposition with the drawings, and demonstrates admirably that use of photographs can be a good study method and not merely copy procedure. His course is purposely broken down into separate volumes to present portable books inexpensively, each concentrating on the desired subject matter in its own way. Once a student has acquired technical facility in handling heterogeneous subject matter he should emerge a better artist, whether he uses it in delineating these subjects or for more creative solos. Mr. Watson is a good teacher; his course is well organized and presented with clarity, enthusiasm and simplicity. Recommended.

MUSIC

(Continued from Page 9)

ing is the first, the unavoidable discipline.

Now I offer you a report from another land, a society the opposite of our own, where stability of the home and soil is far older than patriotism. In this society poetry is able to speak, almost without ambition, of common events and durable appearances. Here, from "the oldest place on the globe," I offer another correspondence.

Four years ago I received a letter from Ralph Stackpole, who lives in the Auvergne, France. The letter was about his neighbors, who were the local bandsmen, and how a group of them piled into a bus, after hours, to drive some forty miles to the nearest town, where there was an imported concert. At the time I wished to share the letter by publishing it here, but when my enthusiastic reply brought no answer, I did not. Here, after years, is the answer, and since it tells about poetry I include it in this place, uncut, complete, but punctuated. Those of you who do not read French will have to do as the French poet, here mentioned, reads T. S. Eliot.

Dear Mr. Yates:

This note is not spontaneous as a fan letter should be. It has been cooking a long time, since your good letter two or three years ago. Once picking grapes with the Verdier family, Annie and her friend Louisette Grangon were working in the next row and gossiping a mile a minute. I thought best not to listen and I thought out a whole letter to you. I was so pleased and somehow I never wrote it out. I read your articles, to me they fit the other arts as well as music. I memorized the fragments of Charlotte Mew's verse you quoted. Memorizing verse is a habit I caught from a Pioneer Grandmother. Music, by chance I've been around it a bit, couldn't say I know much about it. I enjoy sounds, even the piano being tuned. 7 years I've been in France, this time have heard music, seen pictures, sculpture and building, read poetry. You no doubt have heard it asked, "What was your best musical experience?" If I were asked what I liked best in these 7 years I'd say the experience of knowing a little about French verse, and purely again by chance I met a group of young people in Normandie who were interested in poetry, to them I owe some shortcuts finding the best poets. They, the group, were Ducloux an engineer, Donald a school inspector, Jacques public accountant, and Odette a nurse. Whenever they gathered in a restaurant or house (they always took along books of poetry) they would start reading, each taking turns. They were excellent readers and they enjoyed themselves and I got in on the enjoyment. Like all groups they scattered, Ducloux and Odette married, went to North Africa, they live in Meknes, he makes airports, she works in a clinic and has at times some of the Sultan's wives as patients. I shall never forget the group and their eagerness. One reason why poetry is a flourishing art, the commercial returns are the lowest, thousands and thousands of poetry books published each year, the poet pays the bill, sends them around to other poets, friends, and to people interested. The letters they get in return are sorts of scalps, like clippings for the scrap book. In our village here we have a poet, Helen Morange, a frail ex-school teacher who had hardly been out of the region. 4 years ago in Paris she won one of the big poetry prizes, Prix Francis Jammes, and through her I have heard about poets. Some she likes and has correspondence with. One, Roger Michael, a building contractor in Paris, he wrote "Matins du Monde," an oratorio, Messiaen the music, but mostly he writes about things in the building trade:

"Loin du chantier
Ou flottent l'odeur des mortiers
Et le pollen des pierres . . ."

At one time Roger Michael taught cello to make a living. Then there is another man, Pierre Delisle, who lives here in Auvergne. I met him once, he likes T. S. Eliot, doesn't know English, but likes the sound of the words. This may give an idea of M. Delisle's work.

"Je rassure les enfants
La vie aussi vraie que l'autre
Réside dans les crayons
Les images des beaux livres
Vagues d'abeilles
S'en vont la nuit et glissent
Aux prairies de vérité."

There are many words that appear often in French poetry, their

lated woven solids. Custom printing offers special colors and individual fabrics. Large and small scaled patterns plus a large variety of desirable textures furnish the answer to all your fabric needs; reasonably priced. Angelo Testa & Company, 49 East Ontario Street, Chicago 11, Illinois.

FURNITURE

(296a) Contemporary Danish Furniture: New line featuring the "Bramin" convertible sofa designed by Hans Olsen, awarded first prize at the annual Danish Furniture Exhibition; other noted architects and designers include Gunni Omann, Carl Jensen, Jens Hjorth, Bjerrum, Joho. Andersen, Hovmand Olsen and N. M. Koefoed. For further information, catalog and price lists write on your letterhead to: Selected Designs, Inc., 14633 Ventura Boulevard, Sherman Oaks, California. Showrooms: Paul Rich Associates, 120 South Robertson, Los Angeles 48; K.I.P. 720 Montgomery Street, San Francisco, California.

(314) Furniture, Retail: Information top retail source best lines contemporary lamps, accessories, fabrics; designs by Eames, Aalto, Rhode, Noguchi, Nelson: complete decorative service.—Frank Brothers, 2400 American Avenue, Long Beach, Calif.

(138a) Contemporary Furniture: Information. Open showroom to the trade, featuring such lines as Herman Miller, Knoll, Dux, Felmore, House of Italian Handicrafts and John Stuart. Representatives for Howard Miller, Glenn of California, Kasparian, Pacific Furniture, String Design Shelves and Tables, Swedish Modern, Woolf, Lam Workshops and Vista. Also, complete line of excellent contemporary fabrics, including Angelo Testa, Schiffer, Prints, Elenhank Designers, California Woven Fabrics, Robert Sailors Fabrics, Theodore Merowitz, Florida Workshops and other lines of decorative and upholstery fabrics.

These lines will be of particular interest to Architects, Decorators and Designers. Inquiries welcomed. Carroll Sagar & Associates, 8833 Beverly Boulevard, Los Angeles 48, California.

(270a) Furniture (wholesale only): Send for new brochure on furniture and lamp designs by such artists as Finn Juhl, Karl Ekselius, Jacob Kajaer, Ib Kofod-Larsen, Eske Kristensen, Pontoppidan. Five dining tables are shown as well as many Finn Juhl designs, all made in Scandinavian workshops. Write Frederik Lunning, Distributor for Georg Jensen, Inc., 633 N. La Cienega Blvd., Los Angeles 46, California.

(265a) Catalogue sheets and brochures available on a leading line of fine furniture featuring designs by MacDougall and Stewart, Paul Tuttle, Henry Webber, George Simon, George Kasparian. Experienced contract department at Kasparians, 7772 Santa Monica Blvd., Los Angeles 46, California. For further information write on your letterhead to above address. Showrooms: Carroll Sagar & Associates, 8833 Beverly Blvd., Los Angeles 48; Bacon and Perry, 170 Decorative Center, Dallas, Texas; Scan, Inc., 326 South Lake, Pasadena, Calif.; Casa Goldtree Liebes & Cia., San Salvador, El Salvador, C. A.

(285a) Wholesale Furniture: Executive office furnishings, desks, tables, chairs. Custom and contemporary styling for all institutional, commercial and residential furniture. Special cabinet and upholstered pieces. Special design service. All materials, brass, wood and metals. Visit our showrooms: Monteverde-Young Co. (formerly Leathercraft Furniture Mfg. Co.), Los Angeles, 970 North La Cienega Blvd., or factory showrooms, 3045 East 11th Street, Los Angeles 23. In San Francisco: Fred T. Durkee, Jackson Square.

(297a) Furniture: Brochure of photographs of John Stuart chairs, sofas and tables, designed by Danish architects of international renown. These pieces demonstrate the best in current concepts of good design. Included are approximate retail prices, dimensions and woods. Send 25c to John Stuart, Inc., Dept. AA, Fourth Avenue at 32nd St., New York 16, N. Y.

(300a) A new catalog, Raymor's complete collection of living and dining room furniture, is available. It illustrates room dividers, desks, chairs, chests, extension tables and numerous other units manufactured in Denmark according to Raymor specifications and American tastes. Also included are key pieces in the domestic furniture line, as well as a few accessories. Many new units are shown for the first time.

Catalog packets are available to dealers, accredited architects, decorators and interior designers, without charge, upon receipt of a written request at the offices of Raymor, 225 Fifth Avenue, New York.

(301a) Chaircraft of California, Inc., announce a complete new service. Upholstered furniture manufactured and custom-made to your design and specifications. Original design service available by Jack Sherman on both residential and commercial furniture. Excellent production facilities. Finest quality workmanship and 10 day service are featured. Chaircraft of California, Inc., 831 E. 31st St., Los Angeles 11, Calif. Phone: ADams 4-0164.

(248a) Furniture: Paul McCobb's latest brochure contains accurate descriptions and handsome photographs of pieces most representative of the McCobb collections of furniture. Write for this reference guide to Directional, Inc., Dept. AA, 8950 Beverly Blvd., Los Angeles 48, Calif.

(257a) Furniture: A new eighteen page brochure contains 30 photographs of John Stuart furniture demonstrating a concept of good design with emphasis on form no less than function. Accompanying descriptions include names of designers, approximate retail prices, dimensions and woods. Available from John Stuart Inc., Dept. AA. Fourth Avenue at 32nd Street, New York 16, N. Y.

(247a) Contemporary home furnishings: A new 1955 illustrated catalogs: Illustrated catalogue presenting important examples of Raymor's complete line of contemporary home furnishings shows designs by Russell Wright, George Nelson, Ben Seibel, Richard Galef, Arne Jacobsen, Hans Wagner, Tony Paul, David Gil, Jack Equier and others. Included is illustrative and descriptive material on nearly 500 decorative accessories and furnishings of a complete line of 3000 products. Catalogue available on request from Richards Morgenthau, Dept. AA, 225 Fifth Ave., New York City 10, New York.

LIGHTING EQUIPMENT

(277a) Lighting Fixtures: Complete information on contemporary lighting fixtures by Chiarello-Frantz. Feature is "Light Puff" design: pleated, washable, Fiberglas-in-plastic shades with anodized aluminum fittings. Accessories include wall brackets, floor and table standards, and multiple canopy fixtures for clusters of lights. Write to: Damron-Kaufmann Inc., 440-A Jackson Square, San Francisco 11, California.

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(119a) Recessed and Accent Lighting Fixtures: Specification data and engineering drawings Prescolite Fixtures; complete range contemporary designs for residential, commercial applications; exclusive Re-lamp-a-lite hinge; 30 seconds to fasten trim, install glass or relamp; exceptional builder and owner acceptance, well worth considering.—Prescolite Mfg. Corp., 2229 4th Street, Berkeley 10, California.

(965) Contemporary Fixtures: Catalog, data good line contemporary fixtures, including complete selection recessed surface mounted lense, down lights incorporating Corning wide angle Pyrex lenses; recessed, semi-recessed surface-mounted units utilizing reflector lamps: modern chandeliers for widely diffused, even illumination: selected units merit specified for CSHouse 1950 Stamford Lighting, 431 W. Broadway, New York 12, N. Y.

(782) Sunbeam fluorescent and incandescent "Visionaire" lighting fixtures for all types of commercial areas such as offices, stores, markets, schools, public buildings and various industrial and specialized installations. A guide to better lighting, Sunbeam's catalog shows a complete line of engineered fixtures including recessed and surface mounted, "large area" light sources with various, modern diffusing mediums. The catalog is divided into basic sections for easy reference. — Sunbeam Lighting Company, 777 East 14th Place, Los Angeles 21, California.

(293a) Custom Lighting Fixtures and Architectural Interior Metal Work: Manufacturers of custom lighting fixtures for banks, churches, residential, and offices. Also complete interior fixtures, desks, check and writing stands, room and office separators decorative interior murals in metal and plastic. Specializing in all metals: brass, copper, aluminum, iron, and newly developed original decorative plastics. Consultation service for design and material recommendation. Send for information and sample decorative plastic kit. Strickley & Company, 711 South Grand View Street, Los Angeles 57, California

(288a) Lighting Fixture: The new double arm, precision positioned, adjustable Luxo lamp is ideal for decorators' studios, plants, hospitals, as well as the home. Moving arms permit easy change of position. Lamp can pivot in a circle 90" in diameter. The shade remains stabile while the arms are in motion, yet may be raised, lowered or tilted at any angle. A variety of mounting brackets are available for wall, desk or sloping surfaces. Obtainable in various sizes and colors, Incandescent and Fluorescent. For catalogues of specifications and prices write Luxo Lamp Corporation, Dept. AA, 464 Bryant Street, San Francisco 7, Calif.

MISCELLANEOUS

(286a) Built-In Vacuum Cleaning System: Highly efficient built-in central cleaning system for residences, institutions, and light commercial. System features inlets in each room on wall or floor to allow easy reach with the hose and its attachments. From the inlets, tubing leads to the power unit which can be placed on service porch, garage or any spot handy for infrequent emptying of the large dust receptacle System is dustless, quiet, convenient and practical for all rooms, furniture, fabrics, rugs, home workshops, cars and carports. Vacuums wet or dry surfaces. Write for information and brochure; Central Vacuum Corporation, 3667 West 6th St., Los Angeles 5, Calif. Phone DUnkirk 7-8131.

PAINTS, SURFACE TREATMENT

(298a) Mosaic Ceramic Tile: Basic floor and wall material in buildings of today, shown in a new 31-page catalog profusely illustrated in full colors. Book also contains ceramic tile selector which deals with each type of ceramic tile, its advantages and appropriate applications. This splendid booklet is a must for your information files. Write for form #208 Mosaic Tile Company, 829 N. Highland, Hollywood 38, Calif.

(283a) Ceramic Tile: Write for information on new Pomona Tile line. Available in 42 decorator colors, four different surfaces, 26 different sizes and shapes. Ideal for kitchen and bathroom installations. Pomona Tile is practical: lifelong durability, resists acids, scratches and abrasions, easy to keep clean. No wax or polish necessary, exclusive "Space-Rite feature assures even spacing. Top quality at competitive prices. Pomona Tile Manufacturing Company, 629 N. La Brea Avenue, Los Angeles 36, Calif.

(225a) Kaiser Aluminum. for Product Design & Manufacture—A new 24-page booklet containing up-to-date information on Kaiser Aluminum mill products and services is now available. Includes data on aluminum alloys, forms, properties, applications and availability. An abundance of tables and charts throughout provides convenient reference material. Booklet may be obtained from Kaiser Aluminum & Chemical Sales, Inc., Industrial Service Div., Dept. AA, 1924 Broadway, Oakland 12, California.

(251a) Concrete emulsions: Red Label Suconem minimizes efflorescence, has proved an effective water-bar. Merit specified for Case Study House No.

value almost like numbers. They would have less meaning in American verse, I think, for example, mur-wall, pierre-stone, mort-death, sang-blood, faim-hunger, souffrance-suffering, volet-shutter, salpetre-saltpeter, amoire-clothes-closet, and of course—amour, vie and bonheur. A whole essay could be written on each word, why they are the roots of the whole people. Helen Morange was here this afternoon. This fragment is from her last book, "Nerveurs."

> Quand il n'y aura que la doublure
> et pas même puisqu'elle est ce qui part
> en premier dans les vieux vêtements,
> quand il n'y aura plus que la trame
> trouée, mordue, sans couleur
> quand ce sera comme dans ces masures
> effondrées, ou l'on voit des coins de vieilles tapisseries
> et la trace d'une ancienne cheminée.

A trace of an ancient chimney wouldn't mean much to us at home but here you see it in ruins in every town. And, too, the word salpetre, saltpeter wouldn't mean anything. Here nearly every house, the foundations going down into the ground and the humidity going up in the walls bring saltpeter-making stains and odor, and as an enormous amount of poetry roots in a dwelling house, thus salpetre is a word common in poetry.

You asked why I lived in Auvergne and not in Mallorca or some frequented place. Partly by chance, too, partly because this is my wife's country. My son was sick in Paris, we came here for his health. The National Conservatory in Clermont is 24 kilometers from here. He went there to continue studying. We bought a house. You wrote you liked building stone walls, you would like our place. We have rods and rods of stone wall, a stone house, stable, barn and pigeon tower. Our house is a new house, it was built 85 years ago. The church in the 11th century. It's rated *monument historique*. The region is surrounded by a chain of black domes (extinct volcanoes). The school teacher says it's the oldest place on the globe, the domes were red hot before the Alps were thrown up. The people who lived here before the Romans came were Gaulois. They had no written language and we have only the Roman accounts of what happened. Anyway one of the local men, Vercingetorix, gave the Romans a hard time. A stone not far from here says Julius Caesar camped here in 53. 3 or 3½ centuries later tribes from the north. Barbarians, Romans called everyone not Roman, Barbarian, and they destroyed everything but a few bridges and walls. There is sort of a curtain pulled over from the 4th to the 8th or 9th century and only faint glimmers through it. There were laws passed that you could only murder and mob on certain days of the week. I'll jump to the 11th, 12th & 13th & 14th—on nearly every hill or high place around here there is a castle, built there for strategic reasons, wonderful pieces of engineering and building, showing a force and vitality unbelievable. Many are in ruins, no records of their beginning. Many are nearly ruins, a few still inhabited, usually by owners that cannot or will not get help to keep them up, and they are more than lonely. Records of the people in the moyen-age are sparse, mostly from court records, crime, witchery. Of good deeds, and no doubt there were, no account was made. My wife's family have always lived here. A cousin in the mountains above us can name by memory grandparents back 5 generations. One was in Russia with Napoleon, gone 14 years and no word from him. One day he showed up married and commenced to work the land.

My son went to New York a year and a half ago, he had in his pocket Prix d'excellence for oboe, lere prix for oboe, lere medaille for music de chambre oboe, lere medaille for music de chambre piano. Naturally we have heard practising on the oboe and piano for a long time, now the house is quiet and the piano dead. I don't believe this letter is up to the one I thought about when I made vendange with Verdiers, anyway I'll send it and best wishes and good luck. Please remember me to Mr. Entenza.

Ralph Stackpole

One the back he added a longer poem by Jean Tardieu, and he enclosed a photograph: "The photo is of our pigeon tower, the gate opens in the courtyard, a hazelnut tree, and at the right the house." The pigeon tower is of raw stone and mortar, with a graceful mortice near the top of the bare wall under the tiles. In front of the gate a woman is wheeling a basket on a hand barrow.

Now go back to your television, if you wish.

ART

(Continued from Page 11)

people with the objects in their lives. The thick masses of paint help to give the hermetic quality to the interiors. Several of the smaller paintings are done in what appears to be black asphaltum—a dull but deep black—in which midnight blue or dark green forests of human silhouettes can be descried. He has a magical way with paint and uncannily suggests the deep wordless experiences of the soul.

The indulgent elders, for the second season in a row, have served up enough "young talent" shows to make themselves foolproof alibis for posterity. We have had an *embarras de jeunesse*. With the accelerated activity of art galleries and museums, and even galleries, in the field of "discovering" new talent, it hardly seems likely that a future "great" will have been overlooked.

The young have been favored with special amnesty—they are not even judged. In the countless shows featuring painters "under 35" or even younger, the "authorities" have gratefully suspended judgment. Everyone knows that a painter cannot be judged on the basis of what he produces during the first fifteen years of his painting career. By virtuously supporting the young and fresh, those in a position to take a stand are freed from responsibility.

History has its esthetic quirks. In the early 19th century, during Napoleon's reign, there was hardly a school boy who didn't write verse. Even subalterns in Napoleon's service were expected to declare themselves in alexandrines to the ladies. Nowadays, painting seems to be the lingua franca of the cultured. It is an agreeable state of affairs from some points of view, but it becomes hazardous when appropriate methods of selection and evalutation are neglected.

Last year the Museum of Modern Art, and this year the Whitney (as well as a score of galleries) have honored the condition of being young. The intention: to encourage youth. But the means are misguided. It would be far more encouraging, and constructive, to offer exhibitions of mixed groups: good painters in all age groups. (It seems unthinkable to most museums to stage shows without special occasions and a publicity handle.) If younger painters suffer by comparison with more mature artists, it can only be a stimulant. If they take their place with dignity, in spite of their youth, so much the better.

The Whitney fiasco, "Young America 1957" featured artists under thirty-five. Combining the country, and probably in the interests of cross-sectionalism, stressing out-of-town "talent", the Whitney offered a show of some thirty young artists of whom only a third might even be considered promising. And even that group would have fared better in mixed exhibition, or a few years hence. Among those painters who bore up under the weight of the mediocrity around them were Helen Frankenthaler, Paul Jenkins, Angelo Ippolito, Rosemarie Beck, and to a lesser degree, Jonah Kinigstein and George Mueller. It is too awkward to account for the rest of this disenchanting show. Let it be said that it is time the institutions and galleries recognized that there can be no double standard, no extenuating circumstance in evaluating and exhibiting painting.

17.. For complete information write Super Concrete Emulsions Limited Dept. AA, 1372 E. 15th St., Los Angeles. Calif.

(107h) Tropi-tile: Unusual acoustical tile, unique in texture, beauty and design. Fiberglas backing for noise absorption dramatically camouflaged by the strength and beauty of handsome woven wood surfacing. Can be made to harmonize with any type decor specified and all convention methods of application apply. A development of Tropicraft of San Francisco, 14 Sherwood Pl., San Francisco 3, Calif.

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(213a) Gelvatex Coatings: "First of the vinyl emulsion paints" — These paints have proved their outstanding durability in England, Africa, Canada, France, Australia, New Zealand. Available for all surfaces in wide range of colors. Advantages: lasts up to 7 years or longer; may be applied on either damp or dry surface; dries in 30 minutes; flows on in 25% less time; not affected by gasoline, kerosene, lubricating oils or greases; highly resistant to acids, gases, sun, salt air, smog. Gelvatex film lets surface breathe, will not trap moisture vapor, rain cannot penetrate. For informative literature write to Larry Blodgett, Dept. AA, Gelvatex Coatings Corp., 901 E. Vermont, Anaheim, Calif.

(219a) Permalite-Alexite Concrete Aggregate: Information on extremely lightweight insulating concrete for floor slabs and floor fills. For your copy, write to Permalite Perlite Div., Dept. AA Great Lakes Carbon Corporation, 612 So. Flower Street, Los Angeles 17, Calif.

(228a) Mosaic Western Color Catalog —In colors created especially for Western building needs, all of the clay tile manufactured by The Mosaic Tile Company is conveniently presented in this new 81page catalog. Included in their various colors are glazed wall tile, ceramic, Velvetex and Granitex mosaics, Everglaze tile and Carlyle quarry tile. Completing the catalog is data on shapes, sizes and trim, and illustrations of a popular group of Mosaic All-Tile Accessories for kitchens and baths. For your copy of this helpful catalog, write The Mosaic Tile Company, Dept. AA, 829 North Highland Avenue, Los Angeles, California.

(196a) Panel Tile: New Polystyrene wall tile in 9-inch squares, textured, striated front surface, "sure-grip" diamond back. Eleven popular colors are built in, cannot fade, chip, peel off or discolor. Washable, scratch and mar proof, withstands heat, will not rust, rot, warp or swell. Well suited for residence, business, industrial and institutional installations. Can be installed over any firm, smooth, sealed wall, such as plywood, sheetrock, plaster board or plastered walls. Further information will be supplied by New Plastic Corp., 1025 N. Sycamore, Los Angeles 38, Calif.

(227a) Mikro-Sized Tile—Newly perfected, precision ground tile described as most important development in 20 years of tile making. Reduces setting time, insures perfect alignment of joints, even on adjacent walls and integral corners. Spacing lugs on two edges only—twice the size of regular lugs—providing standard 3/64 inch joints. Time saved by elimination of shimming, sanding, juggling as tiles are uniform in size. For detailed information, write to Mr. Allan Paul, Adv. Mgr., Gladding, McBean Company, Dept. AA, 2901 Los Feliz Blvd., Los Angeles, Calif.

(197a) "This is Mosaic Tile": 16-page catalog describing many types clay tile. Outstanding because of completeness of product information, organization of material, convenience of reference, quality of art and design. Copies of award-winning Tile Catalog presented by The Mosaic Tile Company, Zanesville, Ohio.

ROOFING

(146a) Fiberglas (T.M.Reg. U.S. Pat. Off.) Building insulations—Application data, specifications for insulating walls, top floor ceilings, floors over unheated space. Compression-packed, long continuous rolls, self-contained vapor barrier. Goes up quickly, less cutting and fitting. High thermal efficiency. Non-settling, durable, made of ageless glass fibers. Owens-Corning Fiberglas Corp., Toledo 1, Ohio.

SASH, DOORS AND WINDOWS

(290a) Indoor Movable Shutters—Illustrated brochure shows many features and installations of Paul Heinley Indoor Movable Shutters—with details on newest shutter treatment, Shoji Shutters. Specifications include construction details, methods for installing and information for ordering or requesting bids. Paul Heinley, 2225 Michigan Ave., Santa Monica, California.

(284a) Solar Control Jalousies: Adjustable louvers eliminate direct sunlight and skyglare at windows and skylights; some completely darken for audio-visual. Choice of controls: manual, switch-activated electric, completely automatic. In most air-conditioned insti-

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tutional, commercial and industrial buildings, Lemlar Solar Control Jalousies are actually cost-free. Service includes design counsel and engineering. Write for specifics, Lemlar Corp., P. O. Box 352, Gardena, California; telephone FAculty 1-1461.

(202A) Profusely illustrated with contemporary installation photos, the new 12 page catalog-brochure issued by Steelbilt, Inc., pioneer producer of steel frames for sliding glass doorwalls and windows, is now available. The brochure includes isometric renderings of construction details on both Top Roller-Hung and Bottom Roller types; 3" scale installation details; details of various exclusive Steelbilt engineering features; basic models; stock models and sizes for both sliding glass doorwalls and horizontal sliding windows. This brochure, handsomely designed, is available by writing to Steelbilt, Inc., Gardena, Cal.

(244a) Graphically illustrating the uses, sizes and types of steel-framed sliding glass doors is a new 12-page catalog issued by Arcadia Metal Products. Cover of the catalog features a full-color photograph of a Connecticut residence with installation of Arcadia doors. Also shown are uses of the products for exterior walls in a school, hospital, low-cost development house, luxury residence and commercial building. Unusual feature in catalog is "Data Chart" which lists dimensions of glass required for the most popular Arcadia door sizes, rough opening sizes and shipping weights of the product. Profusely illustrated, the catalog contains specifications and details of doors for both single and double glazing as well as information concerning stock and non-stock door sizes. Copies of the catalog may be obtained from Arcadia Metal Products, Catalog 1955-13, P.O. Box 657, Arcadia, Calif.

(256a) Folding Doors: New catalog is available on vinyl-covered custom and standard doors. Emphasizes their almost universal applicability. Folding doors eliminate wasteful door-swing area, reduce building costs. Mechanically or electrically operated. Modernfold Doors Inc., 3836 E. Foothill Blvd., Pasadena 8, California.

(235a) Capri Sliding Glass Doors: A noteworthy advance in building field is new construction of Capri Sliding Glass Doors, making possible comparable costs to window or wall installation. Can be installed into rough opening similar to standard window or door frames. Newly available information describes basic unit as providing choice of combination of anodized aluminum stiles and fine grain ash top and bottom rails, or anodized aluminum rails (both being interchangeable). Developed especially for residential building; equally adaptable for housing projects, custom homes, remodeling construction. For further information write to T. V. Walker & Son, Inc., Dept. AA, P.O. Box 547, Burbank, Calif.

SOUND CONDITIONING

(263a) Acoustical Systems: Non-exposed accessible suspension system for acoustical tile. Flexible, easily installed, low-cost maintenance. Brochure contains specifications, drawings may be obtained from Accesso Systems, Inc., 4615—8th Avenue N.W. Seattle 7, Washington.

(289a) Sound systems—HI-FI and Inter-communication. All types of sound systems for residential, office, industrial, churches, schools, etc. Complete design and installation service. Complete stock of quality component parts. Visit our showrooms. Free consultation service. Write for information, etc. CALIFORNIA SOUND PRODUCTS, INC. 7264 Melrose Avenue, Hollywood 46, Calif. Phone: WEbster 1-1557.

SPECIALTIES

(152) Door Chimes: Color folder Nu-Tone door chimes; wide range styles, including clock chimes; merit specified CSHouse 1952.—NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

(977) Electric Barbecue Spit: Folder Rotir electric barbecue spit with seven 28" stainless steel Kabob skewers which revolve simultaneously over charcoal fire; has drawer action so unit slides in and out for easy handling; heavy angle-iron, gear head motor, gears run in oil; other models available; full information barbecue equipment including prints on how to build in kitchen or den. Merit specified CSHouse No. 17.—The Rotir Company, 8470 Garfield Ave., Bell Gardens, Calif.

(267a) Write for free folder and specifications of "Firehood," the conical fireplace, designed by Wendell Lovett. This metal open hearth is available in four models, black, russet, flame red and white, stippled or solid finish. The Condon-King Company, 1247 Rainier Avenue, Seattle 44, Washington.

(183a) New Recessed Chime, the K-15, completely protected against dirt and grease by simply designed grille. Ideal for multiple installation, provides a uniformly mild tone throughout house, eliminating a single chime too loud in one room. The unusual double resonator system results in a great improvement in tone. The seven-inch square grille is adaptable to installations in ceiling, wall and baseboards of any room.—NuTone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.

(271a) Drafting Board Stand: Write for free descriptive folder on versatile drafting board stand. This sturdy, all-position metal stand attaches to wall, desk, table. Swings flush against wall when not in use. Two models to fit any size drafting board. Swivel attachment available. Releases valuable floor space. Art Engineering Associates, 3505-A Broadway, Kansas City 11, Missouri.

(249a) Fireplace tools and grates: Profusely illustrated brochure showing firetools, stands and wall brackets, andirons (cast iron), grates and standing ashtrays. Merit specified for Case Study House No. 17. Write to Stewart-Winthrop, Dept. AA, 7570 Woodman Ave., Van Nuys, Calif.

(240a) Anthony Bros. pools introdue easy-to-operate rust-proof filter system, with highly effective bacteria elimination. Nightime illumination by underwater light. Special ladder a unique feature. Will design and build pool of any size. Terms can be arranged to customer's satisfaction. Write for brochure, Anthony Bros. Dept. AA, 5871 East Firestone Blvd., South Gate, Calif.

STRUCTURAL MATERIALS

(291a) Decorative Natural Stone: For residential and commercial application. Quarried in Palos Verdes Peninsula of Southern California. Palos Verdes Stone offers wide range of natural stone in most popular types, distinctive character, simple beauty with great richness. Soft color tones blend harmoniously with decorative effects on all beauty and appeal. For interior and types construction to create spacious exterior use. Send for complete color brochure and information. Palos Verdes Stone Dept. Great Lakes Carbon Corporation, 612 South Flower Street, Los Angeles 17, Calif.

(218a) Permalite-Alexite Plaster Aggregate: Latest information on this highly efficient fireproofing plaster presented in detail in completely illustrated brochure. Brochure contains enough data and authority on authentic fire resistance to warrant complete, immediate acceptance of Permalite-Alexite for perlite plaster fireproofing. Many charts and detailed drawings give fire-ratings, descriptions and authorities and describe plaster as lightweight, economical and crack-resistant, withstanding up to 42% greater strain than comparable sanded plasters. Write to Permalite, Perlite Div., Dept. AA, Great Lakes Carbon Corp., 612 So. Flower St., Los Angeles 17, California.

(179a) Filon-fiberglas and nylon reinforced sheet: Folder illustrating uses of corrugated or flat Filon sheets in industry, interior and outdoor home design and interior office design. Technical data on Filon together with illustrated breakdown of standard types and stock sizes; chart of strength data and static load. Additional information on Filon accessories for easy installation.—Filon Plastics Corporation, 2051 E. Maple Avenue, El Segundo, California.

(207a) Unusual Masonry Products; complete brochure with illustrations and specifications on distinctive line of concrete masonry products. These include: Flagcrete—a solid concrete veneer stone with an irregular lip and small projections on one face—reverse face smooth; Romancrete—solid concrete veneer resembling Roman brick but more pebbled surface on the exposed face; Slumpstone Veneer—four-inch wide concrete veneer stone, softly irregular surface of uneven, rounded projections;—all well suited for interior or exterior architectural veneer on buildings, houses, fire places, effectively used in contemporary design. Many other products and variations now offered. These products may be ordered in many interesting new colors. Brochure available by writing to Department AA, General Concrete Products, 15025 Oxnard Street, Van Nuys, California.

(208a) Texture One-Eleven Exterior Fir Plywood: This new grooved panel material of industry quality, is in perfect harmony with trend toward using natural wood textures. Packaged in two lengths and widths; has shiplap edges; applied quickly, easily; immune to water, weather, heat, cold. Uses include: vertical siding for homes; screening walls for garden areas; spandrels on small apt., commercial buildings; inexpensive store front remodeling; interior walls, ceilings, counters. For detailed information write Dept. AA, Douglas Fir Plywood Association, Tacoma 2, Washington.

(243a) Send for new four-page basic catalog covering fir plywood grades and application data in condensed tabular form has been released by Douglas Fir Plywood Association. The folder, based on revisions stiffening grade and quality requirements as outlined in the new U.S. Commercial Standard for fir plywood (CS45-55), is designed as a quick easy-to-read reference piece for builders, architects, specifiers and other plywood users. The catalog covers such essential data as type-use recommendations, standard stock sizes of Exterior and Interior types, recommendations on plywood siding and paneling, engineering data for plywood sheathing and plywood for concrete forms, minimum

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FHA requirements, fundamentals of finishing, and applications for specialty products. Sample copies are obtainable free from Douglas Fir Plywood Association, Tacoma 2, Wash.

(205A) Modular Brick and Block: The Modular and Rug Face Modular Brick, the Modular Angle Brick for bond beams and lintels, the Nominal 6" Modular Block and the Nominal 8" Modular Block, have all been produced by the Davidson Brick Company as a result of requests from the building trade and realization that all building materials can be worked together with simplicity and economy only with Modular Design.
The materials now in stock are available from the Davidson Brick Company in California only, 4701 Floral Drive Los Angeles 22, California.

(184a) Masonite Siding: Four page bulletin describing in detail approved methods application of tempered hardboard product especially manufactured for use as lap siding. Sketches and tabulated data provide full information on preparation, shadow strips, nails, corner treatments and finishing. Masonite Corporation, 111 W. Washington St., Chicago 2, Illinois.

(585) Etchwood Panels: Literature Etchwood, a "3-dimensional plywood" for paneling, furniture, display backgrounds; soft grain burnished away leaving hardwood surface in natural grain-textured surface; costs less than decorative hardwood plywood; entirely new product, merits close consideration. —Davidson Plywood & Lumber Company, 3136 East Washington Boulevard, Los Angeles, Calif.

(299a) Construction Plywood: Announcing a new, 34-page, four-sectioned construction guide containing full-page structural drawings that provide authoritative basic information on types, grades, and applications of fir plywood for builders, architects, engineers and building code officials. The booklet covers information on floor construction, single and double wall construction, and roof construction, while including recommendations and plywood excerpts from "minimum property requirements" of the FHA. Booklet is designed for maximum simplicity of use and quick reference, all contained in convenient notebook form, ideal for draftsmen. Sample copies available without charge from Douglas Fir Plywood Association, Tacoma 2, Washington. Quantity orders are $12.50 per hundred.

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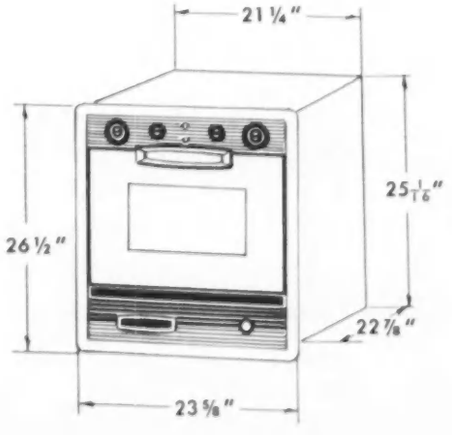

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